



AN  
ESSAY,

ON THE

ART of DECRYPTHERING



®

THE ART OF DECTYPHERING

AND

ESSAYS

ON THE

ART OF DECTYPHERING

THE ART OF DECTYPHERING



AN  
ESSAY

ON THE

*ART of DECTYPHERING.*

In which is inferted a

Discourse of Dr. WALLIS.

*Now first publish'd from his Original Manuscript in the  
Publick Library at OXFORD.*

---

By JOHN DAVTS, M. A. Rector of *Castle-Ashby* in  
*Nor:hamptonshire.*

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*Sequiturque PATREM non Passibus æquis. VIRG.*

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(Price One Shilling Six-pence.)

# THE ASSAY

ON THE

ART OF DECRYPTING.

W. ALLEN.



in the

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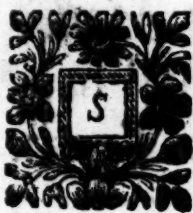
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# P R E F A C E.

 *SINCE the Press is open to Disputes of the highest Concernment in Matters of Politicks and Religion, I see no Reason, why the Art of DECYPHERING should be esteem'd more sacred, and remain the only Subject, on which a Writer may not freely deliver his Thoughts. Being conscious to myself, that I write not for Contention, that I advance nothing, but what I know or believe to be true, that in many Points I endeavour to prove the Truth of what I assert, and that my Design is to inform the Publick, not without a Prospect of thereby doing some small Service to my Countrey; I may hope, that this ESSAY will be favourably received by the Reader, and give no just Cause of Displeasure even to those, whose Opinions I oppose, and whose Errors I detect. If, in the Prosecution of the Argument, I have forbore to use the Terms Science and Demonstration, or if, instead of Rules and Methods, I have chosen to say*  
Guesse

## P R E F A C E .

Guesſes and Steps; theſe are the *Results* of the beſt Judgment I am able to form from the Nature of the Thing treated of. I have learnt both from the Authority of Dr. WALLIS, and from my own Experience, that the Method of Decyphering is *vaga Venatio*: We muſt look for the Hare, where ſhe is not, as well as where ſhe is; we ſometimes weary ourſelves with beating the Buſh to no purpoſe; we ſometimes ſtart the Game, where we little expected to find it; but when that is once done, we are ſufficiently recompenc'd by the Pleaſure we take in the Purſuit. To ſpeak out of Figure, we proceed with our Gueſſes, donec quid certi conſtat, as our great Maſter expreſſes himſelf, or as he elſewhere ſays, till we ſhall happen upon ſomething, that we may conclude for Truth. What that Certainty amounts to, or how ſtrongly we may conclude our Discoveries for Truth, I have given an Account towards the End of the following Diſcourſe; and I hope I have done it with Clearneſs, and to the Reader's Satisfaction. If, after all the Care I have taken, I have committed any Miſtakes throughout the whole Work, (as it is very poſſible I may,) I ſhall be ready upon Conviction to own and to correct them.

I begin with correcting an Error in Decyphering, which was occaſioned through Haſte, and not diſcovered ſoon enough to prevent its paſſing the Preſs. In Sir EDWARD NICHOLAS's Letter to Lord DIGBY, of 26 Mar. 1646. publiſh'd by Mr. CARTE, Num. 434, it is thus printed. " Penden-  
" nis-



P R E F A C E.

*“nis-Castle and Barnstaple are the only Holds we have now  
“in the West.” This is not true in Fact; for the City of  
Exeter (together with the Princess HENRIETTA) was not  
surrender’d till above a Fortnight after the Date of this Let-  
ter. So that instead of “Pendennis-Castle and Barnstaple,”  
we are to read, “Pendennis, Exeter and Barnstaple.”*



the Castle and Barracks are the only holds we have more  
as the Well. This is not true in fact; for the City of  
Exeter (together with the Prince's Henricetta) was not  
burnt, but about a fortnight after the Date of this Act-  
er. So there is a head of "Princess's Castle and Barracks"  
we are to read "Princess's Castle and Barracks".





A N  
E S S A Y  
O N T H E  
*ART of DECTPHERING.*

**W**HILE Mr. *Carte* was compiling the Life of that *meri-  
torious* Servant of the Crown the first Duke of *Or-  
mond*, one of his Papers, relating to that Affair, by  
mere Accident came to my Hands. It was the Du-  
plicate of a publick Letter from King *Charles I.* to the then  
Marquis of *Ormond*, Lord Lieutenant of *Ireland*, dated at  
*Oxford*, 2 Dec. 1645, and counterfign'd by Sir *Edward Ni-  
cholas* Secretary of State. As this Letter was in great mea-  
sure written in *Cypher*, I eagerly applied myself to *decypher* it;  
I found it a much easier Task than I expected, and the Letter  
is now the 414th Paper in Mr. *Carte's* printed Collection. At  
that Gentleman's Request I have since discover'd, sometimes with  
more Labour and sometimes with less, six or seven other diffe-  
rent *Cyphers*.

Being known to have met with this and the like Success, I have been desir'd to publish something concerning the *Art of Decyphering*; with which Request I the rather comply, for that of late Years much has been *said* and *written* about it so loosely and at random, that it has serv'd to puzzle Men's Understandings, more than to inform them. What sort of *Art* it is, will in general be seen from the following Sheets; and tho' I do not propose, that upon the Perusal of them the Reader shall immediately commence *Decypherer*, yet I venture to promise him, that he will find several Things in them worth his Observation on so curious a Subject.

With regard to my own Share in the Performance, I shall be careful to tell him nothing but the Truth, tho' I do not oblige myself, in every Particular, to tell him the whole Truth. For it has long been a Rule with us, and from the Nature of the Thing it ought to be so, not to *divulge* All that we know of the Matter; of which more hereafter.

In the mean time I am to observe, that in a certain Case Dr. *Wallis* was occasionally call'd the *Father* of this Art. Soon after, there appear'd in the *London Journal* an unknown Author under the feign'd Name of *Britannicus*, who took upon him to acquaint the World, that \* “ the Doctor never could be thought to be the Father of an Art, which was in Being many hundred Years, before he was born.” It is often very difficult, and sometimes impossible, to decypher *proper Names*; nor am I much concerned to know, who *Britannicus* is. The Sum of what I can collect from the Account he has given of himself is, that he is a \*\* *Layman*; that in one Case, thro' the † *Indulgence* of the House of Lords, he found no great Difficulty in hearing with his own Ears, whatever was necessary for his own Satisfaction; and that upon another Occasion he also attended at

\* See *Remarks* on the B. of R's Speech, pag. 12. col. 2.

\*\* Ibid. p. 34. c. 1.

† *Remarks* on Mr. K's Speech, p. 1. c. 1.



at the same Place, as many others were † *permitted* to do. But, whosoever he is, if he be a Person of Candor, he will the better bear to be freely told of the Mistakes he has committed, in treating of an Art, in which, I presume, he does not desire to be thought very expert. It would have been kindly done of him, if he had produced his Vouchers in proof of his Assertion, *That the Art was in Being many hundred Years, before Dr. Wallis was born.* But I am persuaded, that he had a confused Notion of the Matter *here*, as he manifestly had in *another* \* Place, and mistook the Art of *Cyphering*, or *Writing in Cyphers*, for the Art of *Decyphering*. The former of these we allow to have been very ancient, but the latter, if I greatly mistake not, will prove to be a more modern Discovery.

Dr. *Wallis* has given so just an Account of *Johannes Baptista Porta*, that I have but little to add to it. His Book *De furtivis Literarum Notis, vulgò de Ziferis* was printed at *Naples* 1563, at *London* 1591, and (with the Title alter'd to *De Occultis &c.*) at *Strasburg* 1606. As his Rules for *Decyphering* concern only *simple Cyphers*, such are commonly *framed on purpose to put Persons to a Tryal*, and which are now well known to be mere *Trifles*; so they are professedly calculated for what should be written in *Latin* or *Italian*, tho' capable of being accommodated to other Languages. But the main Question, which, I confess, I am not able to resolve, is this, Whether he were the first Man, that ever *decypher'd* without the Help of a *Key*. It is certain, that he thought himself the First, who ever † *wrote* upon that Subject. B 2 Dur-

† *Remarks* on the B's Speech, p. 2. c. 2.

\* "He had not only his own great Skill in that Art of *Writing in Cyphers* to have recourse to; — but he had then in Town with him a Person from *Oxford*, very learned in the Art." *Ibid.* p. 10. c. 2. — In what Art? Not the Art of *Decyphering*, but of *Writing in Cyphers*. However, I return the Gentleman Thanks for the Compliment he design'd to a Stranger, as much as if it had not suffer'd in the Delivery.

† — "de re tam implicatâ, præsertim autorem qui *neminem* habuerim, quem sequi potuerim, &c." *Porta*, lib. 3. cap. 4. p. 195. *Edit. Argentorat.*

During the Time, in which *Porta* flourish'd, an extraordinary Accident fell out at *Paris*. A Dispatch of the *Spaniards*, written in another kind of Cypher than those of *Porta*, was intercepted by the *French*, sent by that Court to *Franciscus Vieta*, and decypher'd by him. As Dr. *Wallis* says nothing of this in his ensuing Discourse, it was probably unknown to him at the Time, when he writ it. However that were, the Story is particularly told us by *Thuanus* in the 129th Book of his History; where, after having shewn the Occasion the *Spaniards* had for Cyphers, and their abundant Caution in using them, he proceeds thus.

“ Such was that Cypher, consisting of above 500 Characters,  
 “ which they used in the destructive ten Years War against us;  
 “ at which Time we intercepted several of their Letters of very  
 “ considerable length, giving a full Account of their Resolutions  
 “ and Designs. But so great was the Number of the Characters,  
 “ that the common Decyphers knew not, what to make  
 “ of them. Whereupon the King ordered them to be laid before  
 “ *Vieta*, who little expected such a Task, and would have  
 “ been better pleased with applying his Thoughts to any other  
 “ Subject. However, having acquired a Habit of close Attention  
 “ to serious Studies, he decyphered the whole, and being  
 “ once become Master of the Key, readily interpreted many  
 “ other Letters of the highest Importance. This put the Spanish  
 “ Affairs into great Confusion for full two Years; till by intercepting  
 “ Letters of ours they discovered the Matter, and  
 “ were forced to contrive a new Cypher, instead of that which  
 “ they judg'd to be incapable of being decyphered. And to  
 “ put the most odious Construction, they could, upon the Case,  
 “ they industriously gave it out, especially at *Rome*, that the  
 “ King had acted in it by *magick* Art; for that they were sure,  
 “ the Thing could have been done by no other Means; but the  
 “ Report was entertained only with Scorn and Derision by Men  
 “ of Sense.”

From



From this Account I observe,

1. That here is mention made of *common Decyphers*, of those, *qui vulgò his in rebus industriam suam exercent*. And what Wonder is it, provided *Porta's* Book were published at *Naples* some *twenty* Years or more, before the Time that *Thuanus* speaks of?

2. That One very *difficult* Cypher was discovered by *Vieta*, and that it is reported as a *new* Thing, attended with no small Surprize and Amazement. But when once the *Spaniards* were satisfied, that it was really so, and thereupon formed another Cypher, we hear no more of his Decyphering. It is pity, no *Specimens* of this wonderful Performance were preserved, that so we might have fully seen, what Sort of a Cypher it was, and how it was used. The Want of which gave the Compiler of the *Acta Lipsiensia* occasion to say, that \* “ the Credibility of “ the Fact rested upon the single Authority of *Thuanus*.” I don't believe, the Gentleman had the least Thought, by this Expression, to diminish the Character of that celebrated Historian, but I mention this to shew, that if Dr. *Wallis* had known, when he first attempted an intricate Cypher, that *Vieta* had once succeeded in a like Attempt, yet this could have been of no farther Service to the Doctor, than as it might have encouraged him to undertake, what was *possible* to be performed. *Vieta* † died in 1603, *Porta* † died in 1615, and Dr. *Wallis* was born \*\* in 1617. So that, in all Probability, here is a great Deduction to be made from the *many hundred* Years, in which we were to have understood, that the Art of *Decyphering* had been in being, before Dr. *Wallis* was born.

How

\* “ In hoc quoque genere *Vieta* laudes æquabit, imò vincet, si duraturo ad Posterios specimine ostendat, quod Illum fecisse solo *Thuani* Testimonio credere cogimur.” Ep. *Leibn.* ad *Wallis.*  $\frac{1}{2}$  Mar. 1697. *Wall.* Op. vol. 3. p. 674.

† *Thuanus.* † *Collier's Dictionary.* \*\* Ob. Oct. 28. A. D. 1703. Æt. 87. See his Monument at St. Mary's Oxon.

How the Dr. first came to apply himself to this Art, we shall have from himself; what use he made of it, we have had, tho' unfairly, from other Hands. But as his Skill in the Art of *Decyphering* has no Relation to his *Political* Principles, he might be very *sagacious* in one Respect, and very *erroneous* in the other. I wish, both for his own Credit and the publick Good, that he had employed his Skill in the Service of the King; but it is too well known, that he did not so. He was publickly charged in his Life-time by *Henry Stubbe*, and from him by *Anthony Wood*, with "having decyphered (besides others, to the Ruin of many "loyal Persons) the King's Cabinet taken at *Naseby*, and as a "Monument of his noble Performances, depositing the Original, with the Decyphering, in the publick Library at *Oxford*."

If this be what *Britannicus* \* means by the Doctor's assisting the *State* in *Discoveries*, he will not easily prove, that it was worthy of a *good* and *honest* Man to have done so, tho' he had known the Art to be founded on the first *Principles* of *Reason*, and every *Step*, that he took in the Practice of it, to be attended with strict *Demonstration*.

But after all, the Account given us by *Stubbe* is not *exact*; neither, as to its main Article, is it *true*. When the Doctor had decyphered any Letters for the *Party*, to whose Interests he was attached, it is natural to suppose, that he returned the *Originals* to the Persons, from whom he received them. This at least is certain, that his manuscript Collection consists only of *Copies*, the whole being written by his own Hand. But, which is much more material, I can safely aver, that in this Collection there is not any one of the Letters taken at *Naseby*. Had the Doctor decyphered those Letters, I know not, whether he would have scrupled to insert some one or more of *them* among the *rest*; but I believe, that he decyphered none of them. We shall have, in what follows, the Opinion of Lord Chancellor *Hyde* upon the

\* *Remarks*, p. 12. c. 2.



the Point, that no more of them were decyphered, than those which were found decyphered, or those, the Keys to which were found. And indeed the Thing seems to speak itself; for if the *Cabinet* were taken, (as it is agreed on all Hands, that it was) how could the *Keys* of the *Cyphers* escape? Where can we imagine the King to have lodged them, but in his *Cabinet*, together with the *Letters*, which were written by them? So that after all the Clamour that has been raised, and all the Credit it has obtained, it is most probable, that Dr. *Wallis* had no Hand in decyphering the King's Cabinet taken at *Naseby*.

For the rest, as I do not undertake to acquit this very great Man of having done considerable Disservice to the royal Cause, so I gladly embrace the present Opportunity of making the best Apology for him, that his Case will bear.

I observe then, that a little before the Restoration we meet with him again, appearing not only under the Character of an eminent Decypherer, but of a Subject, who was disposed to make some Atonement for his former Transgressions. This we learn from the *English* Life of Dr. *Barwick*, p. 251, 252. " Altho' every different Person's Letter was written in a different Cypher, and that contrived with great Thought, yet they were all decyphered by the Art and Ingenuity of a certain very famous *Mathematician*, who was hired by the Rebels. For it was the very same Artift that made these Discoveries, who (too officious to gratifie the Rebels) had (as was intimated above) decyphered his Majesty's Papers, written also in Characters, and taken at *Naseby* Fight. Yet he had now at last this in him of a good Subject, that at this Time he discovered nothing to the Rebels, which much concerned the publick Safety, though he satisfied some of the King's Friends, that he could have discovered a great deal. But all those whom it concerned being sufficiently assured, that no Key of any Cypher had fallen into the Enemies Hands; it was  
" thought

“thought nothing but Vain-boasting, when the Rebels bragged  
 “that by the Help of their Friends, they were able to find out  
 “the most hidden Secrets of the Royalists; till Mr. *Matthew*  
 “*Wren* (Son to the Rt. Rev. Bishop of *Ely*) who was intimately  
 “acquainted with this *Mathematician*, obtained of him some  
 “Copies of those Letters, as he had decyphered them, and  
 “took Care to have them delivered severally to the Persons that  
 “wrote the Letters, who all acknowledged them for their own,  
 “and left no room to doubt of the Decypherer's Art.”

The Body of the Doctor's Manuscript consists of 227 Pages in 4to, and was given by him to the publick Library in the Year 1653. A *French* Letter subscribed *Brassel* is dated at the *Hague* 4 *April* that Year, (this being the latest Date of any Paper in the whole Collection,) and is left undecyphered. The Introduction to this Collection is, what I here present to the Reader; and if, after the Perusal of it, he will not give me Leave to call Dr. *Wallis* the *Father* of the Art of *Decyphering*, I believe at least, he will find it hard to name any one before him, who has ever laid down this essential Observation concerning it, that an Artist may easily fail of Success, when he does not meet with a *Quantity of Writing suitable to the Difficulty of the Cypher*.

I shall only add in this Place, that how criminal soever it might be in a Decypherer, (supposing the very worst of the Case,) to betray the King's Counsels, break his Designs, and ruin his faithful Correspondents; those Considerations are now at an End, and the Case is entirely altered. They that have the highest Respect for the Memory of the Royal Martyr, and the best Opinion of the Righteousness of his Cause, are now the most forward to enquire after, and to publish, all the Remains they can meet with of his admirable Pen. If any Gentleman has still by him a Treasure of this Kind, which has not yet seen the Light, it would be worthily done of him to follow the Example of the Right Honourable the Earl of *Arran*, by communi-



municating it to the Publick. And if any Parts of it be written in Cyphers, the Keys to which are not found, one would think, there needed not much Sollicitation, to prevail with him to put them into the Hands of some able Decypherer, to the Intent that both Himself and the World might have the Satisfaction of knowing what they contain.



*Dr. WALLIS to the Reader.*

“ **TH**AT I might not seem too abruptly to expose to  
 “ View this ensuing Collection of Letters and other  
 “ Papers, without signifying whence they are, or what  
 “ they mean, and how far myself is concerned in them,  
 “ I conceive it requisite, that I should give some brief Account  
 “ thereof; at least to satisfy the Readers Expectation, who per-  
 “ haps might think himself somewhat uncivilly dealt with, if  
 “ I should not (as the Custome is) say somewhat to him at the  
 “ first Entrance, but passe him by wholly unsaluted.

“ It is not unknown to those who know any Thing of pub-  
 “ like Affairs, of how great Concernment it is, especially in ci-  
 “ vill Commotions, for those who are to manage such Transa-  
 “ ctions, to be furnished with continuall Intelligence from their  
 “ Correspondents, yet so as to conceal their Councils and Re-  
 “ solutions from the adverse Party. And to this Purpose, in all  
 “ Ages, much Care and Industry hath been still used, how in  
 “ Matters of Consequence, to convey Intelligence safely and  
 “ secretly

secretly to those with whom they hold Correspondence, so as not to be intercepted by the Enemy, or if intercepted, at least not discovered. And as this is no where of more Concernment, so no where more difficult, than in civill Wars, where the intermingling of opposite Parties makes it difficult, if not impossible to distinguish Friends and Foes.

Upon this Occasion many Methods have been invented of secret Writing, or Writing in Cipher, (as it is usually called) a Thing heretofore scarce known to any but the Secretaries of Princes, or others of like Condition; but of late Years, during our Commotions and civill Wars in *England*, grown very common and familiar; so that now there is scarce a Person of Quality, but is more or less acquainted with it, and doth, as there is Occasion, make use of it. And though heretofore Men were perhaps contented with slight and easy Ciphers, (in comparison of those now in Use,) because even those were then accounted sufficiently secure from being discovered; scarce one Man in an Age being found who could decipher them; yet now the Fear of Danger hath made Men so cautious, and brought this Art to so great an Improvement, as that there is scarce any now used but such as might, with very great Probability, be judged impossible to be discovered without a Copy of that Key whereby they were written. Of this Sort divers have at sundry Times been intercepted, and brought to my Hands to decipher: And I have not often failed in any that I have attempted, which was of any considerable Quantity, futable to the Difficulty of the Cipher wherein they were written: Divers of which I have here transcribed in this Collection.

If any ask, with what Confidence I durst adventure upon a Task so unusuall, as interpreting of Letters committed to Cipher; I shall only give this plain Account thereof.



“ The first that I did attempt, was that which I have here  
 “ set in the first Place ; and it was the first that I had ever seen  
 “ written in Cipher : (For before that Time as I had never  
 “ been acquainted with such Ways of Writing ; so much lesse did  
 “ I know what belonged to the Work of Deciphering, or indeed,  
 “ whether any such Thing were at all fezible :) But the Let-  
 “ ter, \* soone after the Intercepting of it, being shewed mee as  
 “ a Rarity ; I was cursoryly asked, whether I could read it. I  
 “ told the Gentleman that shewed it mee, I could not tell,  
 “ whether I could or not ; but that if he would leave it a while  
 “ with mee, I would give him a further Account of it : Add-  
 “ ing withall, that if it were nothing but barely a new Alpha-  
 “ bet, as at the first Sight it seemed to bee, I thought it might  
 “ possibly bee done. The Gentleman, who did not expect such  
 “ an Answer, told mee, Hee would leave it with all his Heart,  
 “ if I had any Thoughts of reading it : And accordingly did  
 “ so.

“ After Supper (for it was somewhat late in the Evening  
 “ when I first saw it) having a while considered what Course to  
 “ take, I set about it, and within a few Houres (before I slept)  
 “ I had overcome the Difficulty, and transcribed the Letter in  
 “ a legible Character.

“ This good Successe upon an easy Cipher (for so it was) made  
 “ mee confident, that I might with the like ease read any other,  
 “ which was no more intricate than that : But I had no Thoughts  
 “ at all, that there would bee any Possibility of deciphering any  
 “ so intricate, as some of those I have since met with.

“ Upon the News of my reading this first Letter, I was soone  
 “ after solicited to attempt some others, which had been then  
 “ lately intercepted in a *Figure-cipher*. But upon the first Sight  
 “ of them, I concluded the Work impossible ; and told the

C 2

“ Gentle-

\* It was intercepted by Sir *William Waller*, after his taking of *Chichester*, which  
 was on the 29th of *December* 1642.

“ Gentleman who requested it, that I thought it altogether in  
 “ vaine and to no Purpose to attempt it. For though I had  
 “ deciphered one before, yet that was wholly of another Na-  
 “ ture, that Cipher being onely a single Alphabet, and not in-  
 “ volved with those Intricacies, which it was sufficiently mani-  
 “ fest these were. And so I took no further Thoughts concern-  
 “ ing them, nor heard more of them, but suppose the Thought  
 “ of deciphering them was given over as a Thing desperate.

“ Not long after I was againe sollicitated in like Manner to en-  
 “ deavour the deciphering of a † Letter from Secretary *Winde-*  
 “ *bank* to his Sonne, which was supposed to containe Matters  
 “ of Consequence. And although I had as little hope to succeed  
 “ therein as in those I had before refused to meddle with, as  
 “ judging it a Work impossible : Yet I was by Importunity pre-  
 “ vailed with to attempt it.

“ In this second Attempt I found, as I did expect, the Case  
 “ much varied from that of the former : For as that was one  
 “ of the easiest, so this second was one of the hardest that I  
 “ have ever met with. I found presently upon the first Peru-  
 “ fall, that beside other Characters intermingled, the numerall  
 “ Figures were continued beyond seven hundred, so that all-  
 “ though all the intermediate Numbers were not actually made  
 “ Use of, (as it could not be expected that they should ) yet I  
 “ found that I had to do with a Cipher containing near 800 Cha-  
 “ racters ; without any of those Advantages which in my former  
 “ Attempt had afforded mee the greatest Assistance. And I was  
 “ so much the more at a Losse, because that I was wholly un-  
 “ acquainted with the Way, either of Ciphering or Deciphering,  
 “ (save onely what I had learned from the former Letter,) for  
 “ I had never so much as seen a Key to any such Cipher, nor  
 “ knew from whom I might receive Information, in what Way  
 “ such Ciphers are wont to bee made use of.

“ How-

† Dated at *Paris* Mar. 1. 1641. *French* Stile.



“ However partly out of my owne Curiosity, partly to satisfy the Gentleman’s Importunity that did request it, I resolved to try what I could do in it: And having projected the best Methods I could think of for the effecting it, I found yet so hard a Task, that I did divers Times give it over as desperate: Yet, after some Intermissions, resuming it againe, I did at last overcome the Difficulty; but with so much Paines and Expence of \* Time as I am not willing to mention; though yet I did not repent of that Labour, when I had discovered thereby, that it was a Businesse, which though with much Difficulty, was yet capable to bee effected.

“ I was afterwards informed, that *Baptista Porta*, and one or two more, had written somewhat of that Subject, (which before I knew not;) upon this Information I was willing to see whether I might from any of them find any Directions, that might help mee, if I should afterwards have the like Occasion: But I found very little in any of them for my Purpose. Their Businesse being for the most Part, onely to shew how to write in Cipher, (which was not my Work,) and that Things so written were beyond the Skill of Men to decipher. Onely in *Baptista Porta* (who alone if I mistake not, hath written any Thing to Purpose about deciphering, and was it seemes famous in his Time for his Abilities that Way;) I found that there were some general Directions, such as were obvious from the Nature of the Thing, and which I had before of myself taken Notice of, and made use of so farre as the Nature of an intricate Cipher would permit. But the Truth of it is, there are scarce any of his Rules, which the present Way of Cipher (which is now much improved, beyond what, it seemes, it was in his Days) doth not in a Manner wholly elude, (as any who shall think it worth  
“ while

\* As I remember, Mr *Blencowe* has told me, that it was about a Quarter of a Year.

“ while to apply them to Practice shall soon find; ) those being  
 “ onely fitted to such a Kind of Cipher, as it seemes, was at  
 “ that Time in Use, (such perhaps as the first of these Letters)  
 “ but can afford little or no Help in those perplexed Ciphers,  
 “ which are now used. So that I saw, there was little Help to  
 “ bee expected from others; but that if I should have further  
 “ Occasions of that Kind, I must trust to my owne Industry,  
 “ and such Observations as the present Case should afford. And  
 “ indeed the Nature of the Thing is scarce capable of any other  
 “ Directions; every new Cipher almost being contrived in a  
 “ new Way, which doth not admit any constant Method for the  
 “ finding of it out: But hee that will do any Thing in it, must  
 “ first furnish himself with Patience and Sagacity, as well as  
 “ hee may, and then *Consilium in arenâ capere*, and make the  
 “ best Conjectures hee can, till hee shall happen upon something  
 “ that hee may conclude for Truth.

“ However the Successe that I had already had, made mee  
 “ the more inclinable to the like Attempts afterwards at the  
 “ Solicitation of divers Persons of Honour and Quality; where-  
 “ in I have had such Successe, as the following Collection doth  
 “ manifest. For which my greatest Reward hath been the  
 “ Satisfaction of my owne inquisitive Curiosity, and the grati-  
 “ fying of some Friends that have requested it. And indeed I  
 “ should never have had the Patience to take that incredible  
 “ Paines about it, which I have often done, had not my owne  
 “ inquisitive Disposition in searching out Difficultyes been a  
 “ greater Argument to perswade mee to it, than any Gain which  
 “ either I have received or do expect from it: Though I know  
 “ that lesse Services than these are have been oft rewarded with  
 “ greater Recompences than I look for.

“ If any ask my Judgement concerning the Goodnesse of the  
 “ Ciphers here used, whether it were the Weaknesse of the  
 “ Cipher, (and consequently the Negligence of those concerned  
 “ therein



“ therein in not contriving a better,) which did expose them to  
 “ the Danger of being deciphered ; or that it is not possible to  
 “ invent any that may bee free from that Danger, I answer,  
 “ Neither. For, as I do not doubt but there may bee a Cipher  
 “ so intricate, as may bee beyond the Art of Man to disclose :  
 “ So neither do I blame those for want either of Skill or Care,  
 “ that made use of these. And if it bee considered, who the  
 “ Persons are that make use of them, and about what Affaires ;  
 “ it will bee easily beleived, that it is not likely there should  
 “ bee any want of Skill to order a Cipher, nor yet want of Care  
 “ and Diligence to conceal their Affaires : The Persons, many  
 “ of them, being Persons of very high Quality ; and others  
 “ whose Employments have been principally that Way ; and  
 “ the Contents of divers of them, Matters of highest Con-  
 “ cernment. And therefore neither the Persons likely to make  
 “ use of, nor the Busineses fit to bee committed to a weak Ci-  
 “ pher, or such as might not bee presumed to bee out of the  
 “ Danger of deciphering. Some of them I confesse are slight  
 “ inough, as that of p. 133. which is nothing but an old Ci-  
 “ pher (if it be worthy that Name) particularly mentioned by  
 “ \* *Baptista Porta* ; and commonly known to Schoole-boys ;  
 “ but secret inough for that which is written in it. And the  
 “ like may bee sayd for that of p. 211. which though it bee but  
 “ an easy Cipher, yet the Matter did not require a better. That  
 “ of p. 214. is not much harder than the former, nor was it re-  
 “ quisite it should bee, for the Contents of it are not such as  
 “ needed a Cipher : But however I thought it not amisse to put  
 “ that among the rest, because I have known some that have  
 “ had an Opinion of some speciall Difficulty in deciphering such  
 “ a kind of Writing beyond that of other Ways of Cipher :  
 “ Which may hereby appear to bee of no greater Difficulty than  
 “ the

\* “ Alius etiam tritus est scribendi modus, quo rustici, mulierculæ, & pueri  
 “ etiam utuntur, &c. *Porta*, lib. 2. c. 14. p. 123.

“ the rest. For though I find since the inserting of it here, (as  
 “ I did then suspect) that it is onely Mr. *Shelton's* new Way  
 “ of Short-writing, which hee calleth \* *Zeiglography*, yet when  
 “ it first came to my Hands, it was wholly new to mee and  
 “ unknown, having never seen any written in that Kind of Short-  
 “ hand before, (though other Sorts I had seen often,) yet did it  
 “ not cost mee much more than an Hours Time to find out,  
 “ That of p. 1. is of the like Difficulty with those before men-  
 “ tioned, containing onely one single Alphabet. Those of p.  
 “ 213. are likewise of the same Nature; which I did not  
 “ therefore insert as if they contained any extraordinary Dif-  
 “ ficulty; but that it might appear, how small a Quantity, in  
 “ an easy Cipher, may be detected; whereas in a Cipher of great-  
 “ er Intricacy, a far greater Quantity is necessarily required.  
 “ That of p. 198. and p. 200. is somewhat more intricate, by  
 “ Reason of the *Nulls* intermingled: But yet may well inough  
 “ passe, if you will, for an easy Cipher.

“ But for the rest (though they are not all of the like Ex-  
 “ cellency) I think the worst of them may very well be ac-  
 “ counted a good Cipher, and such as a wise Man might well  
 “ confide in: And though in the Issue they have not escaped  
 “ deciphering, yet I believe that was one of those Things which  
 “ there was left Reason to fear. For my owne Part, I judge  
 “ that many of them are written in as good Cipher as hath at  
 “ any Time been in Use; and if I were myself to make Use of  
 “ a Cipher, though in a Businesse of great Consequence, I  
 “ would not desire to use a better than many, yea most of  
 “ these.

“ I do not indeed deny, but there is, in the Use of the best  
 “ of these a possible Danger of being detected, (though even  
 “ that, before the deciphering of these Letters, would scarce  
 “ have

\* Read *Siglography* from Σιγλαί, Sigla. Notæ, *Short-hand*. In the *Latin* Edi-  
 tion of *Shelton*, printed at *London* in 8<sup>o</sup> 1671, it is called *Tachygraphia*.



" have been believed) nor will I deny, but that it may bee pos-  
 " sible to contrive some other that may, in Point of Safety, ex-  
 " ceed these: But (not to prejudge the Inventions of future  
 " Times) I do scarce believe, that it will bee an easy Matter to  
 " contrive a Way more intricate (than the Figure-cipher ordina-  
 " rily now in Practice) with the like Convenience for use,  
 " And if any affect some more perplexed Way than any of these;  
 " I doubt not, but that his supposed better Way will bee equal-  
 " ly obnoxious to bee discovered, (though hee perhaps may have  
 " a better Conceit of it,) or else will bee so extreemly tedious in  
 " use, both to him that writes by it, and to him that is to read  
 " it, that it will not admit of any tolerable Dispatch, and  
 " would certainly want many of those Conveniencies, which, in  
 " the Figure-cipher, I could easily demonstrate.

" If yet any ask mee, how I should dare to trust such a Ci-  
 " pher as I know may possibly bee deciphered, I say, that hee,  
 " which will bee deterred by every Possibility of Danger, must  
 " not at all meddle with such Things as need a Cipher: For if  
 " hee do, hee cannot avoyd far greater Hazzards, than that is.  
 " It is but a Possibility, that the Letters written in Cipher shall  
 " be at all intercepted: And if they bee, yet not all of them,  
 " but perhaps some one of many: And perhaps that one may  
 " be one of the least Considerable: Or if of Consequence, per-  
 " haps it will never light in the Hands of those that will at-  
 " tempt to decipher it: Or if they doe attempt it, perhaps  
 " they may loose their Labour. For though there bee a Pos-  
 " sibility of deciphering it, yet it is not every Man can do it.  
 " For of all those Letters, which during the Wars have been  
 " intercepted by either Party, I do not know that there hath  
 " been any one deciphered, save those that came to my Hands:  
 " And I believe that if those had escaped my Hands, they had  
 " likewise escaped that Danger.

" But do I think (you may say) that some others might not

D

" bee

" bee found, who might bee able to do as well as I? I say, Yes  
 " doubtlesse there may; (for I have not such an Opinion of my-  
 " self therein, as that nobody else might bee thought able to  
 " do as I have done) but it seemes by Experience, that those  
 " *some* are not very many, nor very easily found, (for if so,  
 " doubtlesse some or other would have done it;) and those that  
 " could, if they should attempt it, perhaps may not think of  
 " setting themselves upon such a Work, or if they would, may  
 " perhaps have so much other Work to do, that they cannot  
 " attend it; or if they could, yet are not perhaps furnished  
 " with so much Patience, as they will find requisite for the  
 " carrying it on: And the Truth is, I do much more wonder;  
 " that it is done by any, than that it is done by noe more:  
 " So that after all the<sup>e</sup> Considerations, I should not think it any  
 " great Adventure to commit a Businesse of Consequence upon  
 " a just Occasion to such a Cipher, as some of these: Yea were I  
 " necessitated to make frequent Use of a Cipher, I should choose  
 " rather to make use of such as these, than to take the Paines  
 " of contriving one that should be more intricate but withall  
 " more laborious; not doubting but that the Convenience of a  
 " tractable Cipher would countervail the remote Possibility of  
 " being discovered by the deciphering thereof.

" But if any shall think that, because it hath been done by  
 " one, it is therefore so easy a Matter as that it may be done  
 " by any, and do estimate the Danger accordingly, I have for  
 " that Purpose left some (at the End) undeciphered, that if they  
 " think good, they may try their Skill upon them: Which are  
 " not therefore singled out as more difficult than all the rest, (for  
 " they are but of the same Kind, tho' not the same Ciphers;  
 " with some of those that went before,) but because they were  
 " some of the last that came to my Hands, and the rest had been  
 " all inserted as you see them, before I thought of leaving any  
 " in this Kind undeciphered.

" If



“ If after all this, any shall yet think themselves concerned,  
 “ either to find out some more advantageous Way of using  
 “ these Ciphers, (tho’ it will be something hard to light upon  
 “ such a Way, as that some of these have not had it already,  
 “ or at least somewhat equivalent thereunto,) or to contrive some  
 “ better Way of Cipher than any of these, (tho’ that also will  
 “ not be very easy to do,) I am well contented they should so do.  
 “ My chief Aim, in saying thus much being to acquit those,  
 “ whose Writings have happened to bee deciphered, from Negli-  
 “ gence or Folly, in making use of such Ciphers as they have  
 “ done, as if they had committed their Affairs to an insufficient  
 “ Cipher, or that it was merely from the Weaknesse of the Ci-  
 “ pher, that they were detected, whereas they are, I believe,  
 “ (many of them) as good as any that have been hitherto in Use,  
 “ or that are like to bee in Use hereafter : And such as notwith-  
 “ standing the Possibility of deciphering, I should not (as I sayd)  
 “ bee afraid, if I had Occasion, to use myself.

“ As for the Papers that I have here transcribed, I was not  
 “ much solicitous in what Method to place them; and there-  
 “ fore have, for the most Part, set those first that came first to  
 “ my Hands.

“ Some few of them, in the Beginning, I thought it requi-  
 “ site to transcribe first in Cipher alone, that it may the better  
 “ bee seen in what Form they came to my Hands; then the  
 “ Interpretation by itself in a legible Character, that it might  
 “ with the lesse Difficulty bee read; and afterwards both to-  
 “ gether, (the Deciphering being interlined in a red Letter,)  
 “ that so the applying of the Cipher might bee the more dis-  
 “ tinctly observed; and lastly the Key according as it is col-  
 “ lected out of the deciphering, at least so far forth as it is ac-  
 “ tually there made Use of.

“ But I did not think it necessary to continue this Labour  
 “ through the whole; and have therefore in those that follow,

“ only once transcribed the Papers themselves, and interlined  
 “ the deciphering thereof, adding the Key thereunto.

“ In transcribing the Papers, I was carefull to follow my Ori-  
 “ ginals even to a Letter; and therefore have not presumed to  
 “ mend either the Errors in spelling, or other manifest Mistakes  
 “ in the Writing; but have, when there was Occasion, noted  
 “ them in the Margin.

“ In the deciphering I have sometimes left Blanks for some  
 “ few Words, which from the Sense of the Context could not  
 “ bee cleared; especially in Names and Numbers; though even  
 “ these I have sometimes been able to collect either from Cir-  
 “ cumstances appearing in the Papers themselves, or at least  
 “ by comparing them with Matters of Fact, which I might  
 “ otherwise attain the Knowledge of: But in this Case I have  
 “ sometimes forbore the mentioning of Names (even when I  
 “ could have done it) as not being at all materiall to my pre-  
 “ sent Purpose.

“ In some few Places, where I might upon Conjecture have  
 “ perfected the Sense, yet because the Sense might beare diffe-  
 “ rent Words, and that it did not appear from other Circumstan-  
 “ ces, which of them was to bee taken; I have chose to leave a  
 “ Blank, allowing the Reader thelike Liberty of Conjecture with  
 “ myself for the supplying the Sense; rather than by interposing  
 “ my owne uncertain Conjecture in such Cases, to give Occasi-  
 “ on to the Reader to think, that I had as little Reason for some  
 “ other Words, which I have taken upon mee to determine.

“ Yet I do not think, but that it is possible that I may, in some  
 “ few \* synonymous Words, have taken the one for the other,

“ as

\* *Britannicus* in his *Remarks*, &c. p. 11. col. 2. has told us of some Mistakes, which were candidly acknowledged by a great Artist to have been made by him-  
 self, in Relation to the Words *Care* and *Concern*, and the Words *Provide* and *Pro-  
 cure*;



“ as soon for *suddainly*, *Security* for *Safety*, or the like: But I  
 “ have been so wary and circumspect in the determining even of  
 “ such triviall Matters, if any Ways dubious; that I am very  
 “ confident, if any such Mistakes bee, they are very rare.

“ And I do in this, as also for the Truth of the decyphering  
 “ in all the rest, appeal to those from whom, or to whom they  
 “ have

*cure*; adding, that they are much to the same *Sense*. Whether they are so, let the Criticks judge; I am free to admit, that they *may sometimes* be used indifferently. But the true Question with *Britannicus* was, not how they *possibly might* be used in some Cases, but how they *actually were* used in the Case before him, which he might easily have examined. He was professedly treating of three decyphered Letters, in the Decyphering of which these Mistakes must have been committed; for otherwise there was no manner of Occasion to acknowledge them. The Letters were *then* in Print, and may *still* be read. Before *Britannicus* communicated this Particular to the Publick, ought he not, at least for his *Friend's* Sake, to have consulted these Letters, and attentively to have weighed all the Passages in them, where any of the controverted Words were found? Had he done so, we might have heard nothing from him of this *candid Acknowledgment*, so far as one may guess from the following Collection of Passages; in every one of which I have put the *wrong* Word instead of the *right*, that it may be the more clearly discerned, what *Sense* arises.

Letter to *Chivers*. “ — to press the Gentlemen *cared*, &c. — it gave me no  
 “ Care to be so freely excused. — wherein I was deeply *cared*.” Letter to *Musgrave*. “ I have also considered *concernfully*, what he had to offer to me in particular, &c. — the :.....s committed to my *Concern* shall be forwarded  
 “ in due Time to the Persons *cared*.” Letter to *Jackson*. “ — to push on any  
 “ Design in so *unprocured* a Condition. Approbation of the Persons *cared*.”

I must now do so much Justice as to declare, that none of the contested Words were put into *Cypher* in more than *two* of these Passages; but that, I presume, was what *Britannicus* neither knew, nor was sollicitous about. *The Words were much to the same Sense*; no body would enquire, how they were used in the three Letters; so that *there* at least the *Sense* might be left to shift for itself *toties quoties*.

But the worst is still to come. The *Remarker* has inadvertently told us, upon which of the two Artists these two Errors, in his *first Trials*, are to be *fathered*; and I should be heartily glad to know farther of him, by what *Rules of their own* they were afterwards corrected. I can imagine but *one Rule*, by which it could be done; and *that*, I hope, is not *appropriated* and *confined* to Decyphers. I am under neither *Care* nor *Concern* to determine, how well *Britannicus* was *provided* to defend his Friend; but what might we not have expected from so fine a Pen, if it had been *procured* to oppose him?

“ have been writtē, who (by this exposing of them to view) may  
 “ have the Opportunity of examining them by their owne Key;  
 “ and consequently of detecting my Mistakes, if any bee; some  
 “ of whom, I presume, would not think themselves obliged  
 “ much to favour mee in that Kind, if they could therein de-  
 “ tect any considerable Errors; (though neither do I know any  
 “ just Reason that any hath to bee much offended, for what I  
 “ have done in the deciphering of them; ) of whom I desire  
 “ but this Favour, or Justice rather, that, as I have been ex-  
 “ tremely carefull not to wrong them in the least Measure by  
 “ my Mistakes or groundlesse Conjectures; so that they would  
 “ deal with mee *bonâ fide*, if they shall charge mee with any,  
 “ and not affirm those to be Mistakes, which are not. And I  
 “ believe, if any such shall take the Paines to examine my  
 “ Work that Way, they will rather wonder how I should bee  
 “ able to choose the right in seeming doubtfull Cases, wherein  
 “ they might think, I had nothing to direct mee, than find  
 “ any Occasion to contradict my Conjectures.

“ As for the Reasons which moved mee thus to expose  
 “ them to View, I shall onely say thus much; I did not think  
 “ it worth the while to publish them in Print, (nor perhaps  
 “ would it bee convenient so to do,) and yet thought them so  
 “ considerable as not to bee altogether suppressed; especially  
 “ since such Attempts as these are not very frequent, and that  
 “ others doubtlesse would be content to view them. At least  
 “ these Advantages will undoubtedly arise by it; those who have  
 “ a Curiosity to enquire into the Businesse of Ciphers, may  
 “ here see Variety of Patternes, and (many of them) as good  
 “ as they are likely to meet with any where else. And per-  
 “ haps some others may bee as well pleased to see, that a good  
 “ Cipher, which might upon very great Probability bee con-  
 “ cluded to bee safe inough, is yet in a Possibility to be detected:  
 “ And lastly, by this meanes, those who shall live hereafter  
 “ may



“ may perhaps bee informed what Kind of Ciphers those were,  
 “ which have been in use in this Age.

“ Thus much I thought it requisite to say, and I think it  
 “ not necessary to say more; but leave the Judgement of the  
 “ whole to those who shall please to take the Paines to view  
 “ it.”

**I**N the Letters, which pass'd between Dr. *Wallis*, now far  
 advanced in Years, and his learned Correspondents abroad,  
 the Art of Decyphering is often mentioned. These Letters  
 are printed in the Third Volume of the Doctor's Works: I have  
 already referred to one of them, and must do so to others, in  
 what follows.

To proceed then; of the Three Manuscript Letters, which  
 the Doctor has left undecyphered, one is written in *French*,  
 and the other two in *English*. They have now lain in the Li-  
 brary above fourscore Years, and as I apprehend, undisturbed  
 by any but myself. It is surely high Time to acquaint the  
 World, that one of them is at last *very nearly* decyphered:  
 It is *entitled* a Letter from the Duke of *Buckingham*. That it  
 really *is* so, might be known to Dr. *Wallis* by the Hand-writ-  
 ing, by the Confession of the Person upon whom it was found,  
 or by some other Means unknown to us. And it was fairly  
 done of the Doctor, to give me as much previous Light, in  
 that Particular, as he had himself. Without this Notice I never  
 could have guessed, that by 96 was meant the Duke of *Bucking-*  
*ham*; and this Guess was some small Help to me, as perhaps it  
 was to the Doctor, towards the Discovery of the Cypher. The  
 Letter is, as follows.

460. 482. 83. 497. 382. 113.

**S I R**

we e ha v e re ce i v e d  
 Since I sent to you last 442. 23. 217. 18. 60. 367. 128. 13. 54. 32. 46. 89.  
 fu ra n ce s out of La n ca shire from all the co n fi  
 402. 366. 36. 128. 25. 323. 321. 270. 36. 127. 375. 182. 88. 411. 130. 15. 400.  
 de ra b le men in that county that the y a re re a dy to  
 143. 366. 45. 271. 280. 235. 417. 118. 417. 411. 65. 59. 367. 367. 28. 144. 422.  
 ry se for us and do e on ly demand a party of ..... ho  
 371. 399. 181. 429. 83. 145. 60. 322. 275. 154. 10. 327. 321. 492. 505. 220. 38.  
 se from he n ce to counte na n ce — — — the y r e ry  
 399. 182. 218. 15. 128. 422. 118. 303. 36. 128. 7. 42. 68. 411. 41. 17. 32. 371.  
 fi n g be i n g co n fi de n t to be able wi t hi  
 400. 15. 33. 105. 34. 36. 12. 130. 36. 189. 143. 15. 5. 422. 105. 82. 443. 39. 219.  
 n ..... da y e s a f te r the y a r e u p to engage  
 15. 487. 142. 65. 60. 53. 28. 47. 420. 17. 411. 19. 59. 17. 60. 54. 16. 422. 178.  
 wi t h Cromwell w i t h out any o the r as fi s ta n c  
 443. 39. 24. 112. 26. 34. 5. 48. 323. 85. 3. 411. 17. 89. 400. 25. 419. 36. 30.  
 e — — U p o n this A... L..... and so me o t he r  
 60. 66. 68. 63. 37. 51. 15. 415. 71. 254. 83. 401. 288. 3. 5. 218. 38.  
 lord s of great in te re s t in this Kingdom ha v e se  
 252. 25. 321. 193. 235. 420. 367. 53. 39. 235. 415. 242. 217. 63. 32. 399.  
 n t the m ba c k wo r d that u po n the fi r s t d  
 15. 5. 411. 2. 104. 30. 1. 444. 17. 11. 417. 54. 336. 36. 411. 189. 17. 25. 39. 46.  
 ra w ing to ge the r of our army ..... of our be s t  
 366. 26. 236. 422. 202. 411. 38. 321. 318. 73. 479. 506. 321. 318. 105. 53. 5.  
 ho r s e and as man y go o d high la n d fo o t shall  
 220. 17. 25. 60. 83. 89. 279. 19. 204. 62. 46. 222. 270. 36. 11. 190. 3. 39. 393.  
 be se n t un de r the co m ma n d of L.... and  
 105. 399. 36. 5. 428. 143. 17. 411. 130. 2. 287. 15. 46. 321. 277. 83.

Buckingham  
96.



Buckingham in the meane tyme the y haue giue  
 96. 235. 411. 288. 28. 304. 424. 288. 411. 65. 217. 54. 23. 203. 18. 60  
 in Buckingham leaue to rayse a troop of En  
 15. 96. 271. 59. 18. 32. 422. 366. 41. 399. 10. 5. 369. 3. 334. 321. 160.  
 gli shew which with in ..... day  
 33. 272. 53. 48. 220. 38. 399. 26. 219. 29. 48. 443. 5. 219. 36. 487. 142. 41.  
 es will be nere ..... good men I haue c  
 60. 53. 449. 105. 304. 32. 367. 479. 505. 204. 62. 46. 280. 13. 217. 63. 32. 30.  
 he n to goe this way in to Ingland belee  
 220. 399. 36. 422. 204. 60. 415. 441. 19. 235. 422. 236. 270. 15. 46. 105. 271. 60.  
 ving I shall be able to doe the King more feruice  
 54. 236. 13. 393. 105. 82. 422. 145. 60. 240. 290. 367. 399. 38. 18. 61. 128.  
 — fo the n if I went in desguise to sta  
 8. 401. 23. 411. 36. 232. 61. 442. 15. 39. 235. 143. 53. 205. 34. 399. 422. 53. 419.  
 y any where about London This be a rare Colonel Be  
 19. 85. 40. 218. 367. 59. 107. 63. 5. 258. 415. 105. 28. 367. 38. 114. 105.  
 rken he ad will giue you a particula  
 17. 49. 23. 36. 218. 10. 11. 449. 203. 54. 60. 455. 28. 334. 17. 421. 131. 270. 38.  
 a count of the who le buisness and I shall  
 59. 130. 63. 15. 39. 321. 411. 64. 220. .... (271.) 108. 400. 304. 53. 83. 34. 393.  
 desire you to giue e nti rec redit to what  
 140. 455. 422. 203. 18. 23. 60. 15. 421. 367. 29. 367. 144. 39. 422. 26. 217. 5.  
 he shall say for hee has bene the mayne  
 218. 393. 25. 28. 19. 181. 218. 23. 217. 53. 105. 32. 304. 411. 287. 41. 304. 304.  
 go ti a to r of the Lancashire buisness  
 204. 421. 59. 422. 17. 321. 411. 270. 15. 127. 375. 108. 400. 304.  
 s — —  
 25. 7. 20.

I am with great trust Your most  
 affectionate Friend and Servant

Duke  
 134

Buckingham  
 96.  
 A Cypber

A *Cypher* may be defined a Rule, by which a Person *writes* to his Correspondent in Characters arbitrarily agreed upon between them. The *Key*, which is very properly called by the *Italians la Contraziffera*, and by the *French le Contrechiffre*, is the Rule by which the Correspondent *reads*, what is written, as aforesaid, so that, for instance,

If the Cypher  $\left\{ \begin{array}{l} \text{a 1.} \\ \text{b 2.} \\ \text{c 3, \&c.} \end{array} \right\}$  begins thus,  $\left\{ \begin{array}{l} \text{The Key will} \\ \text{begin thus,} \end{array} \right\} \left\{ \begin{array}{l} \text{1 a.} \\ \text{2 b.} \\ \text{3 c, \&c.} \end{array} \right.$

However, in common speaking, that which is written in Cypher, is oftentimes simply called a *Cypher*, as also the Words *Cypher* and *Key* are sometimes confounded. I am now to produce the *Key* to the foregoing Cypher, so far as I have been able to collect it from this one Letter: That is, I am to save my Readers the Trouble of doing, what by this Time they might do themselves.

### K E Y.

|      |      |      |          |               |            |              |
|------|------|------|----------|---------------|------------|--------------|
| 1 k  | 19 y | 37 p | 55       | 82 able       | 134 duke   | 217 ha       |
| 2 m  | 20 — | 38 r | 56       | 83 and        | 140 desire | 218 he       |
| 3 o  | 21   | 39 t | 57       | 85 any        | 142 da     | 219 hi       |
| 4    | 22   | 40 w | 58       | 88 all        | 143 de     | 220 ho       |
| 5 t  | 23 e | 41 y | 59 a     | 89 as         | 144 di     | 222 high     |
| 6    | 24 h | 42 — | 60 e     | 96 Buckingham | 145 do     | 232 if       |
| 7 —  | 25 s | 43   | 61 i     | 104 ba        | 154 demand | 235 in       |
| 8 —  | 26 w | 44   | 62 o     | 105 be        | 160 en     | 236 ing      |
| 9    | 27   | 45 b | 63 u     | 107 bo        | 178 engage | 240 the King |
| 10 a | 28 a | 46 d | 64 w     | 108 bu        | 181 for    | 242 kingdom  |
| 11 d | 29 c | 47 f | 65 y     | 112 Cromwell  | 182 from   | 252 lord     |
| 12 g | 30 c | 48 h | 66 —     | 113 .....     | 189 fi     | 254 L .....  |
| 13 i | 31   | 49 k | 67       | 114 Colonel   | 190 fo     | 258 London   |
| 14   | 32 e | 50   | 68 —     | 118 county    | 193 great  | 270 la       |
| 15 n | 33 g | 51 o | 69       | 127 ca        | 202 ge     | 271 le       |
| 16 p | 34 i | 52   | 70       | 128 ce        | 203 gi     | 272 li       |
| 17 r | 35   | 53 s | 71 A.... | 130 co        | 204 go     | 275 ly       |
| 18 u | 36 n | 54 u | 73 army  | 131 cu        | 205 gu     | 277 L .....  |



|         |           |           |               |        |          |     |
|---------|-----------|-----------|---------------|--------|----------|-----|
| 279 man | 318 our   | 366 ra    | 399 fe        | 420 te | 442 we   | 482 |
| 280 men | 321 of    | 367 re    | 400 si        | 421 ti | 443 wi   | 487 |
| 287 ma  | 322 on    | 369 ro    | 401 fo        | 422 to | 444 wo   | 492 |
| 288 me  | 323 out   | 371 ry    | 402 su 41 the | 424 ty | 449 will | 497 |
| 290 mo  | 327 party | 375 shire | 415 this      | 428 un | 455 you  | 505 |
| 303 na  | 334 pe    | 382 ..... | 417 that      | 429 us | 460      | 506 |
| 304 ne  | 336 po    | 393 shall | 419 ta        | 441 wa | 479      |     |

When a decyphered Letter is published, in which there are some Characters or Numbers *not* decyphered, it has been the *usual* Way, whether in Cases of *Friendship*, or *Enmity*, or *Neutrality*, to publish those very undecyphered Characters or Numbers in their proper Places. This was done by a *Friend*, with Regard to King *Charles's* Letters from *Carisbrook*, in an Appendix to a Vindication of his Majesty, proving him to be the Author of *Εικὼν βασιλική*, &c. *London* printed for *R. Wilkin* at the King's Head in *St. Paul's Church-yard*, 1711. This was done by the *Enemy*, with regard to the same King's Letters taken at *Naseby*. The same Thing was done by *Dr. Wallis*, with Regard to an *unknown* Cardinal mentioned in Cypher by the Marquis *de Bethune*; and the same Thing I have done here. This is *fair open* dealing, to let the World see, *what* it is, that is not decyphered. I can easily conceive, that *some Art* may be *shewn* in *not doing* so; but I am sure, that by *doing* it the *Art* of *decyphering* is not *discovered*. Indeed, to *do this* may sometimes be of singular Use, since a Reader may chance to interpret, what the Publisher could not. For Instance, let any one carefully compare those Letters from *Carisbrook*, and I am much mistaken, if he will not be convinced, that by 40 was intended the Queen, by 41 the Prince, and by 58 the Duke of *Terk*.

But I must not dismiss these undecyphered Numbers, without making a few Observations upon them.

1. The loose Line at the Top *may* contain a *Date*, or a *Direction*, or *both*; 8; signifies *and* in five other Places; the other Numbers come no more, which is all I have to say of them.

2. Here are seven Numbers, which denote proper Names, and I flatter myself, that I can give Account of them all; but I do it with various Degrees of *Assurance*. Dr. Wallis tells me, that the Letter came from the Duke of *Buckingham*. It is subscribed 134. 96. In the Body of it I find, that 96 was to command a Party of *Scots*; and again, that 96 had leave to raise a Troop of *English* Horse, which within *so many* Days would be near *such* a Number of good Men; after which it immediately follows, ----- "I have chosen to go *this* Way into "*England*," &c. From all which I *firmly conclude*, that by 96 was meant the Duke of *Buckingham*. It is *obvious*, that 112 must be *Cromwell*, and 240 the *King*. I *presume*, that 258 is *London*, as conceiving it to be a Place, where a disguised Person of high Quality might propose to lie concealed more safely than at *Lancaster* or *Liverpool*. Of the Lords, who are said to have great Interest in *Scotland*, I *guess*, that by 71 was meant *Argyle*, and by 254 *Lauderdale*; I also *guess*, that 277, who was to be joined in the Command of the Party for *Lancashire*, was *Leslie*; but I dare not be *positive*, that any one of these *Guesses* is true.

3. Here are certain Numbers which were designed to signify *other Numbers*. Probably there was a Method in this Contrivance, but it will be hard to assign that Method, without some farther Light from the Memorials of those Times. My present Opinion is, that when *two* Numbers were put for *one* other Number, the *former* of the two and the *last* Figure of the *latter* were to be struck out. If so, then by 492. 505. by 479. 506, and by 479. 505. will be severally meant the same Number 50; the Gentlemen of *Lancashire* will be understood to have



have only demanded a Party of 50 Horſe from *Scotland*, to *countenance* their riſing; the Lords of that Kingdom to have returned Answer, that they would ſend them 50 of their beſt Horſe, and as many good *Highland* Foot; and the Duke of *Buckingham* to have propoſed, that the *Engliſh* Troop, which he was then raiſing, would amount to near 50 good Men.

But when *one* Number is put for *one other*, as 487 is in two Places, and that, in all Reaſon, for a much lower Number than itſelf, I *imagine*, that the two *extreme* Figures of it are to be ſtruck out; and ſo, the *Lancaſhire* Men would have been confident, that they ſhould have been able to engage with *Cromwell* within *eight* Days after they were up; and the Duke of *Buckingham* would have hoped to complete his Troop within the *ſame* Number of Days. Gentlemen of the Sword are the beſt Judges of ſuch Things, and to Them they are ſubmitted.

It may now be ſeaſonable to touch upon the celebrated Queſtion, whether by delivering up the Key of a Cypher the Art of Decyphering is diſcovered. That it is *not* ſo, is very clear to *me* both from Reaſon and Experience. Beſides what Dr. *Wallis* has left of this Kind in *Manuſcript*, he gave up in *Print* the Keys of two Cyphers, one of them uſed upon no leſs an Occaſion than a *Sede vacante*. I have now given up a Third. By ſo doing we have enabled our Readers the more *readily* to judge, whether the Letters are rightly decyphered; but have we informed them, *how* we did it? Can any Body now tell *me*, how Dr. *Wallis* decyphered this Letter from the Duke of *Buckingham*? If he can, it is more than I can tell *Him*, though I have decyphered it myſelf: And I am under no Manner of Apprehenſion, that any Body can find out, how I did it. Nay, if I ſhould name a certain Number, which tho' coming but ſeldom was exceedingly ſerviceable to me in doing it, I ſhould, without farther explaining myſelf, hardly be believed.

If

If indeed I should declare, what were my first Observations, and why I made them ; which of them proved right, and which wrong ; which of them after a while I utterly laid aside, which I altered, and which I finally persisted to abide by ; if I should farther declare, where the first Glimpse of Light broke in upon me, and directed me to proceed with Courage and Hopes of Success ; what were my next immediate Steps, and when I began plainly to see the Way before me : Such Declarations might be of Use to an industrious Man, and help to guide him in discovering other Cyphers of the *like Kind*. This, I own, is more than is fit to be publicly done ; yet even this would be far from making a *thorough* Discovery of the Art. For \* *pro vario ferarum genere varianda est venatio*, Different Game different Hunting ; and there is little or no relation between the Processes I made in decyphering the Duke of *Buckingham's* Letter, and that which will soon follow from the Earl of *Clanricard*.

But again ; if Dr. *Wallis* had complied with Mr. *Leibnitz's* large Demand of 29 Dec. 1698. this might have given a fatal Blow to the Art. That learned Foreigner had † seen some of the Doctor's Performances in this Kind, and was sufficiently amazed at them ; but still he wanted to know, *how* the Thing was done. He had, before this, intimated his Fears, that the Dr. and the Art might † *Die* together. Being told, that there was

\* Dr. *Wallis* in his last Letter to Mr. *Leibnitz* upon this Subject, 16 Jan. 1693 ingeniously compares *Decyphering* with *Hunting* in these Words ; “ Unum tamen aut  
“ alterum docturus sum, quibus sit ea res Methodis aggredienda, (si saltem *Methodus*  
“ dicenda sit vaga Venatio ; ) monstrando, quibus ego passibus indagando soleo pro-  
“ cedere : (quod ipse pro Sagacitate suâ imitetur :) Nec tamen eisdem semper ; nam  
“ pro vario Ferarum genere Varianda est Venatio. *Wallis* Op. Vol. 3. p. 695.

† 24 Martij S. V. 1698. “ Communicata sunt mecum quæ D. MENKENIO  
“ misisti ; et visa mihi cum admiratione. Sed utinam ipsam quoque Methodum  
“ inveniendi addidisses.” Ibid. p. 688.

† 12 Martij 1697. “ Quæ interesset non perire.” Ibid. p. 674.



was no *certain Method* in the Art, he \*\* acknowledged it, and for *that* Reason wished that some Instances might be preserved of the Manner, in which the Dr. made his gradual Advances in these *analytical* Operations. And not having yet received a satisfactory Answer, he again \* observed, that the want of *Rules* might be supplied by *Examples*, if the *Traces* of the Procedure were ALWAYS marked; whereupon he earnestly pressed the Dr. that he would be prevailed on, not to deny Posterity so great a Benefit. But the Dr. remained Proof against all this Importunity, and wisely shifted off the Request; well knowing, how far he might go without prejudicing, and where he was to stop without ruining the Art.

It may be said after all, that tho' I was at Liberty to decypher this Letter, if I could, yet having done it, I ought not to have made it publick; because it breaks in upon Dr. *Wallis's* Design, who left it as an Exercise and Trial of Skill to future Decyphers. But if no body else *will* try his Skill upon it, how would it answer the Doctor's Design, or what other good Purpose would it serve, to let it lie any longer in that Condition of Obscurity, in which it was left? On the other Hand, by letting the World see, what Success I have had with it, I hope to quicken the Ingenuity and Industry of some other Person, that he may try, what Success he can have with either of the remaining

\*\* 28 Sept. S. V. " Optarem non Specimina tantum, sed et Artificia Artis tuæ Cryptolyticæ, conservari curares. Est enim in his velut fastigium quoddam subtilitatis simul industriæque humanæ. Agnosco, certis methodis comprehendi non posse; et, si potest, minus foret artificiosa. Et vel idè velim ipsa exponi artificia, et quasi calculos Problematis soluti, &c. Ibid. p. 687.

\* 29 Dec. 1698. " Antequàm finiam, patere ut meas exhortationes resumam, nè scilicet admirandam Tuam artem cryptolyticam perire patiaris. Scio præceptis comprehendi non posse aut satis generalibus, aut satis determinatis. At huic defectui succurrerent Exempla, si ascripta illis SEMPER essent ipsa ratiocinationis Tuæ Vestigia. Patere te quæso exorari, et tantum beneficium da Posteritati, &c. Ibid. p. 693.

maining Letters. Our Nation has produced a few good Decyphers, and I wish, there may be continued a Succession of them. It is not necessary, that there should be many at the same Time; but it may happen, that one shall perform, what another cannot, or that one shall be a useful Check upon the other.

But, to make some Amends for the Letter, which I have *thus* intercepted, I shall supply its Place with Part of another, which cost me about four Hours close Attention to decypher, Nov. 5. 1734. It is written in a very particular Manner, the like of which in some respects I had never seen. At the first View it strangely surprized me; I had before me a Prospect but of cold Hunting. And was indeed obliged *Consilium in arena capere, to take my Measures upon the Spot*. As the Case was new to me, so were my Observations upon it such as, I dare say, were never used before in the Business of decyphering. But they proved to be exactly right, and fully answered my Purpose.

*Extract of a Letter from the Earl of Clanricard to the Marquis of Ormond.*

|                  |                    |              |          |              |                  |
|------------------|--------------------|--------------|----------|--------------|------------------|
| 90               | 6645737747         | 83576045     | 109      | 655383814976 | 34               |
| 99               | 677867767358495077 | 23           | 70577852 | 108          | 26 50495371      |
| 8378             | 36                 | 435476415368 | 836977   | 22           | 40               |
| 5972786058415368 | 39                 | 764553       | 91       | 446577736975 |                  |
| 78               | 30                 | 5345735169   | 93       | 29           | 108 664568       |
| 43724176426957   | 105                | 22           | 104      | 32           | 8145795457836944 |
|                  |                    |              |          |              | 33               |



53 70577852 97 109 23 108 74495371 4269754569844582  
 34 61695175 93 5245 666083 24 824163458348 73  
 48658469 5378 20 5578854557 4970 49 72656045 III  
 21 105 40 106 7687 44608387 91 7041735972 30  
 8354 97 20 99 75785883 105 7669 30 91 III  
 576971606581686944 102 25 105 37 73 48418469  
 47787769 76606748 658259814163 105 38 5869457669  
 426083 22 50775485 39 III 617269574953 34 775481  
 61486583 24 6754845782 5978 83417469 25 91 666059  
 102 7663 67787770734469536745 7353 25 107 30 91  
 8169587945675982 39 8378 26 107 49 584854847544  
 102 69604557 80847359 83724958 36 847772657987  
 5049534744785245.

This Extract now appears, just as it came to me, with two or three Errors in the Writing, as usual, and a few old Spellings, which I have not taken upon me to correct. I have produced this Piece, rather than some others now in my Hands, for the following Reasons.

1. Because, as I have already intimated, it is a *Curiosity*.
2. Because I am sure, that I have decyphered it right; for, some Time after I had returned it to Mr. *Carte*, he wrote me back Word, that he had found a misplaced Bit of Paper, by

which it appeared, that my Interpretation was right to a Tittle.

3. Because, being only a Fragment, and without Date, (tho' *that* may nearly be discovered by the Contents,) it is not printed in Mr. *Carte's* Collection.

4. Because the same was afterwards decyphered by a very ingenious Woman, who is capable of becoming a great Proficient in the Art, as I also know several others of her Sex to be.

But the Truth is, that among those who are capable of the Work, very few are \* willing to undergo the Fatigue of it. Hence it is the less to be wondered at, that such strange Opinions have gone Abroad concerning an Art so little known. *Vireta's* Performance was confidently given out to have been the Effect of *Magick*; and when *Locatello* published some *chymical* Secrets in Cypher, it looks as if he had the Fear of the *Holy Office* before his Eyes: For he takes especial Care to inform his Reader, that all those Passages (tho' as yet only *written* in Cypher) had been explained to, and allowed by, his Superiors. So that now an innocent Preparation in *Chymistry* was secured from all Suspicion of *Herésie* or *Witchcraft*. However that were, the Generality of Men were not easily brought to believe, that a Writing might be decyphered by human Means; and I know not, whether all are, even at this Day, convinced of it.

Lord Chancellor *Hyde*, who in the Times of Confusion had too frequent Occasion to correspond in Cypher, has given us his Opinion of the Matter under a Distinction. In his † Letter to Mr. *Barwick* of the 20th of *Feb.* 1688 he says, " It is very natural

\* " Non omnes sunt huic negotio pares, aut discendi capaces; (poscit hæc res peculiare quoddam ingenii acumen: ) Qui pares sunt, (expertus loquor, ) ubi quanti laboris res ea sit animadvertunt, molestiam declinant, et molliora malunt studia "prosequi." *Wallis* ad *Leibn.* Jan. 16. 1693; p. 695.

† App. to the Life of Dr. *Barwick*, p. 501.



“ ral for them to give out such Brags, as they do, of their great  
 “ Skill in Decyphering; for which no body needs to fear them,  
 “ if they write *carefully* in good Cyphers.” His \* next Letter  
 begins thus;

“ *S I R,*

March 8, 1660. *Brussels.*

“ My last to you was of the 20th of the last Month, not  
 “ having dared since to venture any Letter by the Post, upon  
 “ the Alarm I had of their having gotten a Copy of my Cy-  
 “ pher with Mr. *Rumbald*. I have since that Time received  
 “ three from you, one of the 7th, another of the 9th, and a-  
 “ nother of the 13th; and the King had, to every one of those,  
 “ one to him of the same Date; and I see you are very appre-  
 “ hensive of the same Mischief by the decyphering our Let-  
 “ ters, which you impute to Art; as you have great Reason to  
 “ do, if your Letters and others have been decyphered, as well  
 “ as Mr. *Rumbald's*. I confess to you, as I am sure no Copy  
 “ could be gotten of any of my Cyphers from hence; so I did  
 “ not think it probable, that they could be got on your Side the  
 “ Water. But I was as confident, till you tell me you believe  
 “ it, that the Devil himself cannot decypher a Letter, that is  
 “ *well written*, or find that 100 stands for Sir *H. Vane*. I have  
 “ heard of many Pretenders to that Skill, and have spoken  
 “ with some of them, but have found them all to be Moun-  
 “ banks: Nor did I ever hear, that more of the King's Letters  
 “ that were found at *Naseby* than those which they found de-  
 “ cyphered, or found the Cyphers in which they were writ,  
 “ were decyphered. And I very well remember, that in the  
 “ Volume they published, there was † much left in Cypher,  
 F 2 “ which

\* App. to the Life of Dr. *Barwick*, p. 503.

† Only a few proper Names, and a very short Passage in the 9th Letter, as published by the Parliament, but marked 33 in the King's Works.

“ which could not be understood ; and which I believe they  
 “ would have explained, if it had been in their Power : But  
 “ you can easily satisfy yourself in this Point ; if you either  
 “ make a Cypher yourself, or write *half a score* Lines out of  
 “ several other Cyphers, and send them to the Artift : And you  
 “ will then be convinced yourself, and be able to convince  
 “ others ; and then it will be to no Purpose to traffick any more  
 “ in those Commodities.”

From these Letters may be collected the several Particulars, which when united, render a Letter (tho' not always impossible, yet generally speaking) extremely difficult to be decypher'd.

1. The Cypher itself is to be *good* ; such as his Lordship and Mr. Secretary *Nicholas* well knew how to contrive.

2. Only *half a score* Lines written in it may *not* be sufficient ; and Dr. *Wallis* might have been puzzled by so small a Quantity of Writing, tho' he might have been able to master one of his Lordship's large Dispatches written in the same Cypher.

3. His Lordship very justly observes, that the Letters ought to be *well* or *carefully* written. For it is certain, that a *good* Cypher may be spoiled, if it falls into *bad* Hands ; and the Writer often betrays himself by the too *negligent*, and sometimes by the too *affected* Use of it. I have known a remarkable *Case* of the former Kind ; and I do not apprehend, that I shall do any Hurt, (I am sure I intend none,) but rather think, it may be instructive and useful, if I *report* it.

It is well known, that I had publick Leave to inspect the Copies of three Letters bearing Date 20 *Apr.* 1722 ; and I hope, that keeping myself within proper bounds, I shall give no Offence by making some Remarks upon them. The Cypher made use of in these Letters is, in several Respects, very difficult ; but the Difficulty is much abated by the *careless* or the *unskilful* Manner, in which it is used ; as upon Occasion I could easily  
 † shew.



† shew. *Britannicus* is pleas'd to \* inform us, " That it required some Time to transcribe the whole Letters, and to put " the *proper* Parts into *Cypher*." For what Reason he and some others have insisted upon this Circumstance, I forbear to mention; resolving not at all to † concern myself in the Argument, otherwise than as a *Decypherer*. I question, whether *Britannicus* ever knew, how *much* of these Letters was put into *Cypher*, or how *properly* it was done. If that be the Case, then, to what is advanced by *Guess* and at a *Venture*, I reply from *certain Fact*; that I have computed, how *often* any Word, or any Part of a Word whatsoever, (there being no *Nulls*,) was put into *Cypher* throughout the three Letters. And the Account stands thus.

|                                  |        |     |
|----------------------------------|--------|-----|
| In the Letter to <i>Chivers</i>  | ----   | 24  |
| In the Postscript to the same    |        | 45  |
| In the Letter to <i>Musgrave</i> |        | 69  |
| In the Letter to <i>Jackson</i>  |        | 114 |
|                                  | ----   |     |
| Sum total                        | --- -- | 252 |

So that the whole Number amounts, very nearly, to the Number of Words contained in the shortest of the Letters. This being the exact State of the Case; how long Time it would require to transcribe the whole Letters, (thus much of them being put into *Cypher*, and that, in my Opinion, *very* injudiciously,) is humbly submitted to the Reader.

But

† One Instance may suffice for a Sample. In the Letter to *Jackson* was this Passage; " 719 had taken this Resolution before *Hatfield's* Return, and *AM* " pleas'd to find, &c." What great skill is here required, to guess at the true Meaning of 719?

\* Remarks, &c. p. 18. col. 2.

† If *Britannicus* can learn of his Friend the Meaning of 1485 in the Postscript to *Chivers*, and will then consult a Passage in the State-Trials, Vol. 6. p. 473. col. 1. he will find, that I act with *Sincerity* in this Point.

But tho', through the Unskilfulness of the Writer, the Work was rendered easier to the Artists, still some few Words eluded their Art, and their Places were supplied by Points or Dots in the printed Report. Two or three of the undecypher'd Numbers were very *high* Ones, and one of them came *five* several Times; but whether *none* of them were publish'd for either of these Reasons, I take not upon me to determine.

Notwithstanding these unusual Omissions, the very *Blanks* furnish'd us with an Objection, which would have been offer'd in *Evidence*, if the Copies of the Letters had not been deliver'd up. But when those Copies had been fully consider'd, the Objection was not thought sufficient to weigh down Another, namely, that *now* the Question would be asked, whether the Letters were *rightly decyphered*; to which I must have answer'd, that *in the main*, I believed, they *were*. And this I apprehend to have been the true Reason, why I was not call'd.

Our Objection, before the Copies were deliver'd to us, was this. It had been observed from the Print, that one *undiscovered* Word began with G, and another with C; but by the manner of the *Dotting* there seem'd to be *Seven* other Vacancies, without any initial Letter prefix'd. Afterwards, upon Sight of the written Copies, it appeared to be really so; with this Circumstance, that *Five* of the said Vacancies were to be filled with one and the same \* Number. It was reasonably concluded,

\* This *must* be the undecypher'd Number, which was said to stand for *two Words*, if I take that Expression right. Sir *Constantine Phipps* seems to have understood it, as if One Number had stood for two Words in the same Place. (See his Speech in the State-Trials, Vol. 6. p. 401. col. 2.) My Interpretation is, That the same Number stood for *this* Word in One Place, and for *that* in Another. Upon which I observe;

1. That One Number is often put for, or instead of, Another, but then it is done by *Mistake*.

2. That in the same Cypher I have found 118 standing for *County* and for the two first Syllables of *Countenance*; and again, 236 for the Termination *ing* and for the



concluded, that an Artist might have been in some *Distress*, if he were urged to explain, how he could be *assured* of the *initial* Letters of *two* or *three* unknown Words, and yet be wholly in the *Dark*, as to the *initial* Letters of *several* others; and that at least he would have found it convenient on this occasion to take Sanctuary in the Secrets of his Art. But as this Objection was *then* dropped, for the Reason already assigned, I shall *now* wave the farther Prosecution of it, because indeed it cannot be fully discussed without doing some Prejudice to the Art, which is a Thing far from my Intention to do. Nay I dare appeal to those, who understand me best, whether I am not more *Scrupulous* on this Occasion, than they themselves have been.

But as I have owned, that the Letters were rightly decyphered in the main, it is fit I should add, that in our Copies, which *Britannicus* † warrants to be \* *true* and *undoubted*, the Words *may* and *People* were supplied (as I suppose) by the Decyphers; and the Words *write*, *his*, *draw* and *forward* were dotted underneath, as if they doubted, whether they were right:

the three first Letters of *England*. I have elsewhere found n 2. standing sixteen Times for *to* and once for *two*. But this only shews, that the Writers sometimes regarded *Sound* more than *Orthography*.

3. That for the same Number, in the same Cypher, without the least Note of Distinction, to be thus *originally intended* for two Words, differing from each other in Sense, and Sound, and Spelling, is what I have never known, or heard of before.

4. That, as I conceive, there was no occasion to suspect it in the present Instance. For why might not the Blanks have been filled in the following Manner? Blank to *Chivers*, read *General Proposal*; first Blank to *Musgrave*, *Correspondence proposed*; second, \* : . . . . *Proposals*; third to *Musgrave* and both to *Jackson*, *Proposal*. I own this is all *Guess-work*; but if it makes *Sense*, there is no need of having recourse to a *new* and *strange* Supposition.

\* Not yet decyphered.

† Remarks, p. 10. c. 1.

\* It never entered into my Thoughts to doubt, that our Copies were other than *true*; but for all that I greatly doubt whether *Britannicus* ever saw them.

right, which Particulars we could not have known, but from a Sight of the Copies.

Having seen, what is incumbent on him, who writes a Letter in Cypher, in order to render it less liable to Discovery, we are now to enquire, what is requisite on the Part of the Decypherer, in order to make His Work the easier. Dr. Wallis has contented himself with saying, that "he must furnish himself with *Patience* and *Sagacity*, as well as he may, and then "*Consilium in arenâ capere*, and make the best Conjectures he "can, till he shall happen upon something, that he may conclude for Truth." But there are some other Particulars relating to this Matter, which deserve to be considered, And

1. It is \**requisite*, that the Decypherer should know, or have probable Reason to believe, in what *Language* the Letter is written; and that he should also be at least moderately skill'd in that *Language*. I can no otherwise account for Dr. Wallis's Silence on this Head, than by supposing, that he took the Thing for granted: Indeed it is so obvious, that I should hardly have mentioned it myself, had not a Person of unquestionable Credit assured me from the Mouth of Dr. John Keil, that he once decyphered a Paper written in *Swedish*, without knowing a Word of the *Swedish* Tongue. This, as it is reported in gross, and commonly understood, is in my Opinion impossible to be done. But as I wou'd not be hereby thought to charge Dr. Keil with an Untruth, I will state a Case, which I take to be possible and consistent with his Affirmation in a favourable Sense. If then the Cypher consisted of a single Alphabet of Letters, without Nulls, and the Words were separated; if he were told beforehand, that the Writing was in *Swedish*; and if he had with him an Interpreter of that Nation, whom he might consult upon all Emergencies; I see no Reason to dispute his Performance, with all these Allowances. I believe, it must have been an awkward

\* "Primùm itaque proficiet idiomatis scripti notitiam habere." *Porta*, l. 3. c. 2.



ward Piece of Work, and have taken up some Time; but at length he might be able to compass it, notwithstanding his being unacquainted with the Language, since that Defect would in great measure be supplied by the Assistance of his Interpreter. According to the present State of Languages in these Parts of the World, a Decypheter ought by no means to be unskilled in *French*; and I cannot but think, that a well-contrived and well-managed Cypher would be pretty safe in *Welsh*. Which Hint, if it were improved, and duly encouraged, might afford us some Advantage over our Neighbours in Times of War.

2. It may be of Service to a Decypheter, to know what Sorts of Cyphers were used in the Ages, in the Countries, and by the Persons he is concerned with. This may seem at first to be only Matter of Curiosity; but I can truly affirm, that it has more than once been of real Use to me, and that one Cypher has considerably assisted me in guessing at another, tho' perhaps not one Character has signified the same in both. Upon which Account it may not be improper to take a cursory View of such Cyphers, as I have observed in my Reading to have been used, chiefly amongst ourselves, in these latter Times.

In a Book entitled *Cabala, sive Scrinia Sacra*; &c. the 3d Edition, 1691. there is a Collection of Letters from Sir *William Cecil*, Secretary of State to Sir *Henry Norris* Embassador in *France*. In several of these some Passages are put into Cypher, from p. 132, to p. 150, that is, from 3 Nov. 1567. to 6 Apr. 1568. when they began upon a new Cypher, of which we have but little in the following Letters. But of the former Cypher there is enough, to let us into the Nature of it. Several uncouth Characters and some Names of Places, such as *London*, *Paris*, *Dover* and *Calais*, are to be struck out as Nulls. Several other Characters denote Persons, as A the Queen, & the Queen of *Scots*, &c. The Greek Capital  $\Pi$  whether in its true Position, or inverted, or laid on its Side, so as to open towards either Hand,

Hand, signifies *e*. T in four several Positions signifies *a*, and E (or something like it) in as many Situations stands for *n*. In the 142d Page there is a pleasant Mistake of the Editor, who finding in his Copy the Interpretation of what had been written in Cypher in the foregoing Letter, has publish'd it as a *Post-script*. This may suffice for a *Taste* of the Cypher, and may enable any one, who has a Fancy that Way, to proceed farther with it, allowing for many Faults in the Print of various Kinds.

What Cyphers were in Use about thirty Years after, may be collected from some Letters of Sir *Henry Nevill* and Sir *Ralph Winwood*. In one of these, not to mention the Conceits for denoting proper Names, the Letters *q*, *x*, *y* and *z* are Nulls, and each of them serves as an *Index* to a several Alphabet. When any Thing was to be written in Cypher, the *Index* was placed first, to ascertain the *Alphabet*, which continued, till it was varied by another *Index*; and that was sometimes done in the middle of a Word. The other twenty Letters were sorted by Pairs, so that of each Pair either Letter represented the other in the respective *Alphabets*, according to the following Scheme.

|   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|
| q | { | a | b | c | d | e | f | g | h | i | k |
|   |   | l | n | o | s | u | m | r | w | t | p |
| x | { | a | b | c | d | e | f | g | h | i | k |
|   |   | m | u | l | t | w | n | p | o | r | s |
| y | { | a | b | c | d | e | f | g | h | i | k |
|   |   | s | p | r | n | w | o | u | t | m | l |
| z | { | a | b | c | d | e | f | g | h | i | k |
|   |   | u | n | w | p | t | s | l | o | m | r |

Thus we find this \* Passage, x. a r c h i t w y. l w b w c a z.

\* Sir *Henry Nevill's* Negotiation, p. 125.



o h a f t interpreted *Mi Lorde Keper's house*; and † this, y. b c f z. d h f m e m h b q. i c *Proposition 20*; and † this, z. e o t d u y. h c m s c r t w *the Patriarche*.

There is some Affinity between this Cypher and that of *Locatello* in his *Tesauro della Chimia*, which is contrived upon the Plan of the *Rota*, or *Wheel-cypher*, described by \* *Baptista Porta*. In the Circumference of each Circle are inscribed the one and twenty Letters of the *Italian Alphabet*, including *x*. The initial Letter of every Word is to be preserved in its proper Power, and serves as an *Index* to the Cypher, in which the rest of the Word is written. This being supposed, let the inner Circle be moved, till the initial Letter, which is upon it, comes under *z* in the outer Circle; and in this Position the several Letters in the outer Circle will signifie thole, which are over against them in the inner Circle. It follows from hence, that the Letter of the Alphabet next after the initial Letter of the Word always stands for *A*, the next to that for *B*, and so round. It also follows, that neither the Word *Ziffera*, nor any other beginning with the same Letter, can be written in *Cypher* upon this Scheme. The whole Matter may be farther illustrated from the ensuing \*\* *Passage*, being first cleared of above twenty Errors of the Press.

Stlle cmh qoxmng mrqxp narbhc ndcs amusp cmhod pfcnuu  
dip Cruqdfinnqr Deqi dizgxoaæ iz qoxmng tbpurol et ndc crph  
lm fxneqa lmhgbeq ana quanto vuoi mn lm piugqiqmbfeu dip  
aoulnpolp per qoxmng mntxghrxc se fg nsz facqahpa mcqc la  
pibdq umhrx si piglia aoulnpolp lib. 2. stf nzigd odrat ulbcag  
erlef et la faxihzt umhrx si piglia di stfhepni il dftos piu che ndcs  
lmaguzbaub.

The true Reading of which is this.

Sappi, che questo medicamento nonè altro chela polvere del

G 2

~~cornu~~

† Ib. p. 128.  
205, 206.

† Ib. p. 132.

\* Lib. 2. cap. 7.

\*\* Tesauro, &c. p.

*Cornathino* Dame descrittà in questo tesauo, et non, come la scrive l'autore, *ana quanto uiol*; ma la preparatione del antimonio per questo magisterio si fa nel seguente modo; la prima volta si piglia antimonio lib. 2. sal nitro oncie undeci emeza, et la seconda volta si piglia di sal nitro il dopio piu che nonè l'antimonio.

The first *Figure-cypher*, that I remember to have seen used in any publick Negotiation, is in Sir *Isaac Wake's* \* Letter from *Turin*, dated in *August* or *September*, 1619. The Numbers from 1 to 63 inclusive denote the Letters of the Alphabet in a regular Progression; five of them being allotted to each *Vowel*, and two to each *Consonant*. Accordingly, we are to read, 1. 32. 7. 5. 47. 48. 2. 10. 40. 45. *Ambassador*, 12. 30. 13. 91. 50. 27. 40. 35. *Election*, and 42. 2. 60. 32. 15. 35. 50. *Payment*; &c. But when any Number is followed by a Letter, it denotes some proper Name, several of which are explained in the Print.

I imagine, that from about this Time forward the *Figure-cypher* generally obtained; it was sometimes mixed with other *Characters*, very often clogged with *Nulls*, and other Ways disguised and improved, till by Degrees it came to be inconceivably difficult. I need not inform those, who have Opportunities of consulting Dr. *Wallis's* Collection, in what Variety of Shapes it appeared from 1641 to 1653. Some few Instances, during that Period, are in Print; and there may be more, which I have not seen. There is in † *Rushworth* a Letter, with the Decypheration, from the King to the Marq. of *Newcastle*. In the same † Author is a Cypher sent by the Lord *Digby* to Maj. Gen. *Brown*; but in a †\* Letter written by that noble Lord to Sir *Edward Hyde*, many Lines of Cypher are left out, which I much regret. In the †† King's Works by *Royson* there are two

\* *Cassini*, p. 359.

†\* Part 4. Vol. 1. p. 129.

† Part 3. Vol. 2. p. 368, 369.

†† p. 303.

† Ibid. p. 812.



two Paragraphs from his Majesty to the Queen, but not decyphered. And in the \*\* Appendix to the Vindication of *Barwick* there is a decyphered Letter from an unknown Hand to the King. The Paragraphs from the King to the Queen are these.

*Oxford, Mar. 1. 1642.*

Now the King is m a k i n g — all t h e — h a s t  
 h3. 189. e3. 42. 17. 25. 27. 39. 21. 66. 21. 45. 31. 7. 4. 32. 18. 47. 46.  
 e — he may t o — s e n d m y — N e p v e u — R u p  
 9. 3. d4. g4. 46. 35. 67. 48. 7. 40. 5. 43. 74. 3. 41. 7. 33. 62. 8. 63. 68. 50. 64. 34.  
 e r t — t o d e e r t h e — p a s s a g e —  
 9. 51. 45. 69. 46. 37. . . . . (clear) 45. 31. 7. 1. 33. 18. 49. 47. 19. 21. 10. 70.  
 b e t w e e n e and London t h e r i s a  
 13. 7. 45. 58. 8. 9. 41. 10. this a2. 324. in the mean time 46. 31. 7. 50. e3. 20.  
 — d e s y n e — W a r w i k e — c a s t l e  
 3. 6. 8. 48. 75. 41. 9. 2. upon 60. 19. 50. 61. 27. 26. 7. 69. 12. 19. 47. 45. 8. 24.  
 The Queen could w r y t e — t o — the King t o — make . . . .  
 219. 63. 58. 51. 75. 46. 7. 3. 45. 37. 2. 189. 46. 38. 1. g1. 173.  
 . . . . as — I — would have t h e e — h a  
 131. which I think fit to be done a5. 4. 30. 3. n5. d3. 46. 31. 8. 10. 2. 32. 18.  
 v e — t h e — t h a n k s of it — — . . . . —  
 64. 7. 3. 45. 31. 9. 66. 46. 32. 19. 41. 25. 48. k1. e4. 67. 69. 63. (68.) I am now  
 . . . .  
 confident that 173 is right for my Service.

This Letter is not among those, which were publish'd by the Parliament, as taken at *Naseby*.

In the Appendix to the *English* Life of Dr. *Barwick* there is the Sketch of a Cypher sent to him by the Lord Chancellor; but for the whole Cypher we are referred to the *Latin* Life.

Towards

Towards the End of the Account of the *Rye-house* Conspiracy we find a very remarkable Letter from *Scotland*; there are in it a few *Cant* Words, and some others in *Figures*, but the main Contrivance for *Secrecy* lies in the artful Transposition of Words plainly written. This seems to be a very *tedious* Way of Writing, and therefore the less fit for Use; the Writer himself has complained, that the Work took him up *Six Hours*, but if I were *Britannicus*, I would choose to admire, how he could do it so *soon*.

The two Letters publish'd by Dr. *Wallis* have been already mention'd, concerning which and others of the same Standing I shall only add, that Cyphers were become still more \* intricate within the Compass of Fifty Years, and that the Difficulty was daily † encreasing. The Truth is, the *Figure-Cypher* is yet capable of farther Improvement, and that without being much less ready for Use to either Correspondent.

Lastly, † Sir *Paul Rycant* has obliged us with two curious Letters from the *French* King to his Minister at the *Ottoman Porte*, which I decypher'd about 36 Years ago, being then a Member of *Magdalen* College in *Oxford*. I recommend them to the Consideration of any ingenious young Gentleman, who has a Fancy to the Art; and to encourage him in the Undertaking, I give him to understand, that the Cypher is much of the same Kind with the second of those, which are publish'd in Dr. *Wallis*'s Works; and, in one respect, it is easier.

3. It is proper, that a publick Decypherer shou'd know before hand, so far as he can learn, \*\* who the Correspondents are, what their Quality and Employment, whether the intercepted Letter came from, or were going to, the Court or the Camp, and

\* " Jam ante annos plus quinquaginta, quum simpliciores fuerint Ciphrae quam nunc dierum." *Wallis. ad Menken. p. 659.*

† " Ingens in Ciphris concinnandis varietas, et quæ crescit indies." *Ibid.*

‡ History of the *Turks*, Vol. 2. p. 432, &c. \*\* See *Porta*, l. 3. c. 2.



and in short, whatever other Circumstances may enable him probably to judge, what Business is going forward. Such previous Informations indeed are not usual in private Trials of Skill. But it is one thing, when a Person sits down to a Cypher at *Leisure* and for *Amusement*, and when it matters not much whether he succeeds or no; and it is a quite different Case, when he comes to it upon *Duty*, when not only his own Reputation is at Stake, but perhaps the Honour or Safety of his Country may depend on the *speedy* Performance of his Work. The Hurry and Agony of such Thoughts as these are enough to discompose the calmest Mind, to interrupt the Patience and to divert the Attention, which ought to be continued with the greatest Care. It is therefore adviseable not to withhold any due Light, which may be afforded on such Occasions. The Post of a State-Decypherer in *busy* Times is by no means to be envied; and tho' some few Artists,

----- *Pauci, quos æquus amavit*

*Jupiter* -----

having on purpose been put to the Tryal, have constantly been found to produce a Decyphering, which agreed with the Original Keys; yet others of that Profession have now and then had the Mortification to meet with a Disappointment. For my own Part, I would here confess, that I have sometimes been defeated, if I did not think it *impertinent* to do so, after the great Dr. *Wallis* has † acknowledg'd the same thing of himself.

But let us now suppose the Decypherer to have finished his Work; it will in the next Place be demanded, how, or to what Degree, is he *certain*, that he has done it right? To this I shall answer as distinctly as I can. And

I. The

† “ Quod non ità dictum est, quasi spondere auserim, omnes omninò Ciphras me posse detegere: Aliquas enim (sive ob Ciphras nimis perplexas, sive ob ingenii defectum, sive ob conjecturas minùs feliciter positas) solertiam meam subterfugisse non invitùs agnosco.” *Wallis, ad Menken.*

1. The most natural and incontestable Proof, that a Letter is rightly decyphered, is either the Confession of the Writer, or the Seizure of the original Cypher. To such Proof as this, where it may be had, all good Decyphers appeal, and by such they are willing to be tried and concluded.

2. If the given Sense of the Letter shall be found to agree with Facts already passed or with subsequent Events; or if other Letters be intercepted, written about the same Time and between the same Correspondents, which may be decyphered by the same Key; here is a strong Confirmation of the Truth of the first Decyphering. But where all these outward Proofs are wanting, we must wholly rely upon internal Evidence. I say then,

3. That when a Letter of any considerable Length is so decyphered, that all the Parts of the Cypher appear to be consistent with themselves and with each other; that every Number, wherever it comes, always signifies the *same Thing*, or always signifies *nothing*; and that the whole makes true grammatical Sense, or such as may well become the \* Writer, if suspected or known; then we *believe* that the Interpretation is true, we *verily believe*, that no other can be given. However,

4. This is to be understood with some Allowance. For (besides what has been said concerning *Names* and *Numbers*) we do not always pretend to be equally sure of every Part. In general, we think ourselves surest of those Numbers, which come *often*, and denote Letters of the Alphabet, or Syllables, or Particles of common Use. If a Number comes *twice*, the Sense of it *may* be doubted in one Place, and fixed in the other. The greatest Difficulty is, generally, with the Numbers, which come but *once*, and signify whole Words. Yet even the Mean-

ing  
\* Porta observes, l. i. c. i. that Cyphers are used in Love-intrigues. If then *Mis* should be charged with a *Solecism* or a few *false Spellings*, this would rather confirm the Decyphering, than be an Objection against it.



ing of these is often settled, at least by comparing them with other Numbers. For Instance, while I was decyphering the Duke of *Buckingham's* Letter, I was in doubt, whether to render 154 *demand* or *desire*; till finding, that 140 most probably signified *desire*, and could not signify *demand*, I determined them both as they now appear in the Key. But still it may be easily conceived, that some ἀπαξ λεγόμενα in Cypher, as well as in old Authors, are hardly, if at all, to be reduced to a *certain* Signification.

5. We judge a Number to be *null*, when the Sense is complete without it, especially if it happens so, oftner than once, much more, if it happens ten or a dozen Times.

6. We sometimes fall in with a Point seemingly *inconsistent* with the Cypher, which we are forced to call a *Mistake*, or *Fault*, or *corrupted* Passage, and to account for it, as well as we can, like some learned Editors, *invito Manuscripto*. It is no \* Wonder, if such Mistakes be found in *Original* Letters; it is less to be wonder'd at, if they be found in *Copies*. They may sometimes be pretty well *distinguish'd* one from the other, and sometimes not. Faults in the *Original* are generally occasion'd either by the *Nearness* or *Similitude* of two Numbers, or by both; as if 5 be put for 4, 118 for 218, or 32 for 33. But if in a *Copy*, where the Cypher consists partly of *Figures* and partly of *Letters*, I should find ll instead of 11, or ib instead of 16, I should take these to be the Mistakes of him, who transcribed from an *old* Writing what he did not understand.

I cannot here forbear mentioning, that in two † Letters written in the Cypher just now described, *hx* being render'd *not* help'd in *seven* several Passages to make good Sense. But in *one*

H other

\* “ Scriptoris vitio numerum pro numero ponentis, cum tamen præ oculis habuerit Clavem) admitta menda fuisse liquet. Quod et sæpè fieri solet; neque id mirum.” *Wallis. ad Menken.*

† Mr. Carte's Collect. Num. 433, 434.

other Place it would by no means answer, and plainly appear'd to be a Fault in the Writing. My Conjecture was, that it ought to be *hz*, tho' that Character appear'd \* nowhere else; and that if so, it signified the Marquis of *Ormond*. Upon recourse had to the *Original* it was found to be *hz*, and accordingly, the † Letter being from the *King* to the Lord *Digby*, it is printed *Ormond*. I am bold to appeal to any Reader, whether it can be otherwise, supposing all the rest to be rightly decypher'd.

I wish I could now convey it in a *Whisper* to *Britannicus*, that in my Copy of the Letter to *Chivers* I found 423 instead of 1123. He and I are thus far agreed, That the Copies, which were order'd to be deliver'd, were true undoubted Copies of the Papers, from which they were taken, to every body's entire Satisfaction. But, as I apprehend those Papers themselves to have been only \*\* Copies, I leave *Britannicus* to decide, to whom this Mistake may most probably be imputed.

An Artist will easily discern, that I might have enlarged farther upon some of the foregoing Points; but I have purposely declined it, out of a tender Regard to certain *Secrets*, which will not conveniently bear to be explained. But, even with this *Reserve*, I hope I have spoken sufficiently to the *Certainty* of Decyphering, and to the *Test* by which it is to be tried. When a Letter written in Cypher, with the Decyphering carefully interlin'd, and the Key to the same, are publickly produced, I see not, why every judicious Reader, allowing himself due Time to examine

\* The Name *Ormond* comes twice in this Letter, but the first Time it is not in Cypher. The Passage, which I refer to, is this: "Wherefore, if it be not already, I wish *hz* this Way to bynde my hands, least against my Judgment I do my selfe harme; but withall that he stop any Forces from coming over, and employ them for the reducing that Kingdome into a perfect Obedience; &c.  
† Mr. Carte's Collect. Num. 433.

\*\* *Britannicus* indeed (in his *Remarks*, p. 10; col. 2.) has a labour'd Distinction between original decypher'd Letters and Copies, which (at least as applied by him) I have the Misfortune not to understand. His constant Friend may possibly have Skill enough to explain his Meaning, tho' I have not.



examine and consider all Things, is not as competent a Judge of the *Truth* of the Decyphering, as the Decyphering himself. And if he may become so, with Safety to the Art, why should he not? Why should we pretend to more *Secrets*, than we really have? On the other hand, if a Person be convinced, or may be convinced if he will, that a Letter is rightly decyphered, why should he be farther inquisitive, and desire to know, *how* it was done? Has he a mind to be instructed in the Art? But that is not fit to be taught him before all the World; for to do so would indeed be the ready Way to destroy it. We have seen at large, how *cautious* and *shy* Dr. Wallis was upon this Head; and it is farther reported of him, that being once questioned about it in a free Way by Bishop Burnet, he returned this general Answer, "My Lord, Nothing is too hard for *Sagacity* and *Industry*."

I have taken the Liberty to suppose myself better skill'd than *Britannicus* in the Art of *Decyphering*; but in the Art of *Politics* I submit to his *superior Genius*. Accordingly, I have nothing to reply to his learned Discourse, touching the Necessity, the Expedience, the Propriety of producing decyphered Letters as *Evidence* in Cases of Moment. I do not think myself in any respect *qualified* to determine that Point; but I am *inclined* to agree with him in it, provided he will also agree with me, that the *whole Evidence* be produced and fairly examined. I find nothing in his *Remarks*, which may induce me to believe, that Sir *Constantine Phipps* did not stand well in his good Graces, and shall therefore venture to quote him.

\* "It was very necessary, I think, to have printed the Letters in the *Cyphers* and *Characters*, in which they were written, and also as they are decyphered: Then the Persons accused would have had an Opportunity of employing Men skill'd

H 2

" that

“ that Way, to see if they were rightly decyphered. This was  
 “ done in † *Coleman's Case* †.

“ The *French* Letters in the *Appendix* are printed first in  
 “ that Language, and then as they are translated, which was  
 “ not so necessary, as printing the Letters in Cypher in this  
 “ Case : Because almost every one understands *French* enough  
 “ to tell at first Sight, whether a *French* Letter be rightly  
 “ translated ; but 'tis impossible for a Man of the greatest Skill  
 “ in the Art of *Decyphering* to tell upon a sudden at the Bar  
 “ whether a Letter be rightly decyphered.”

The only Reason, that I have ever heard given against this  
 Manner of Proceeding, is that it would discover the Art of De-  
 cyphering. But as I flatter myself, that I have already obviat-  
 ed this Objection, so I here \* add, that it had not Weight e-  
 nough to prevent true Copies of the three Letters from being  
 delivered up, and *maturely* examined. Since therefore this has  
 been

† See the *Postscript*.

† This was done in the Case of the Letter from *Scotland* before-mentioned. It  
 is printed first, as it was copied from the *Original*, Errors excepted ; it is then  
 printed *legibly*, all that was written in Cypher being decypher'd ; and again it is  
 printed *intelligibly*, all the Words being restored to their proper Places, and the  
*Cant* Words explain'd in the Margin. The *Key* indeed is not added, but for the  
 Manner of Decyphering we are refer'd to another Book, which I have not seen.

\* Not to insist that, among many others, a considerable Part of the very Cypher  
 in dispute had been *already* publish'd by Order of the House of Commons, *Append.*  
*fol. 11.* For in the *Report*, p. 45. we are expressly told, that “ among certain Pa-  
 “ pers was found a Piece of a Cypher, (meaning that which I here refer to) which  
 “ the Committee were inform'd was a Supplement to the Cypher made use of in  
 “ *Jones's* and *Illington's* Letters.” And I make no doubt but it is so ; for I find it  
 very consistent with the *far greater* Part of the Cypher, as it is used, and has been  
 explained, in all the three Letters. Particularly, 1719, which is put in the Sup-  
 plement to signify *Us*, is rendered accordingly in the Letter to *Jackson*. In one  
 Point indeed the Person, who formed this Supplement, seems to have forgot him-  
 self, when he appointed 1574 to signify *Suspicion* ; at least, if 1517 be rightly de-  
 cyphered in the Letter to *Musgrave*. Had I been the *Informer*, methinks I should  
 have caution'd the Committee not to publish this, if I had believed, that by deliver-  
 ing up the *Key* of a Cypher the Art of *Decyphering* would be discovered.



been so common a Practice, if the Art of Decyphering be hereby discovered, it is plain, that it is discovered already, and ought no longer to pass for a Secret. It is plain, that Secretaries of State in particular must long since have been perfect Masters of it, and needed not to call in any Body, under the Notion of a *superior Artist*, to assist them in decyphering. But if on the other Hand it cannot be shewn, that by such Procedure any one Person whatsoever has become a Decypherer, then it seems to be as plain, that the Art of Decyphering is not thereby discovered.

And as I take this to be the Truth of the Case, it may well be expected on all future Occasions, that an Artist shall choose freely to offer up his Cypher, rather than endeavour to suppress it. For my own Part if I were *subpoened* to give Evidence touching a Letter, which I had decyphered; in regard both to my own Vindication and the just Merits of the Cause depending, I should desire of all Things, that, some reasonable Time before the Trial, I might have leave to communicate my Papers to the Council on both Sides. If this Favour were allowed me, the Substance of my Evidence at the Bar would probably be reducible to some such Form as this.

“ It is well known, that I have been versed in the Art of  
 “ Decyphering from my Youth, and I can produce Witnesses  
 “ of undoubted Reputation, who have framed Letters in Cy-  
 “ pher, on Purpose to put me to a Tryal, and have *generally*  
 “ found my Decyphering to agree with the original Keys, which  
 “ had been concealed from me. I do not pretend, that this has  
 “ *constantly* been my Case, for it must be owned, that some  
 “ Cyphers have proved too hard for me. But I am ready to  
 “ communicate a small Collection of Letters decyphered by  
 “ me, which were written in the Time of the civil Wars, and  
 “ in very perplexed or intricate Cyphers. My Interpretation  
 “ of them perfectly well agrees with the Histories of those  
 “ Times;

"Times; and the Keys to some of them have since been  
 "found.  
 "I have now decyphered the Letter, which is before the  
 "Court, and given the true Sense of it according to the best of  
 "my Skill and Judgment. But being unwilling, that a Thing of  
 "so nice a Kind should wholly rest upon my own Judgment, I  
 "have laid my Papers before the learned Council for their In-  
 "spection. They have had first a true Copy of the Letter in  
 "Cypher only, that it might the better be seen, in what Form  
 "it came to my Hands; then the *Interpretation* by itself in a  
 "legible Character, that it might with the less Difficulty be  
 "read; and afterwards *both* together, the Decyphering being so  
 "interlined, that the Cypher may be distinctly applied to it;  
 "and that both might be compared with the greater Ease to  
 "themselves, and to those whom they may have been pleased to  
 "call to their Assistance, they have in the last Place had the  
 "Key, as I have collected it out of the Decyphering, so far as  
 "it is actually there made Use of.  
 "If any Person concern'd remain unsatisfied with my Inter-  
 "pretation in any Part of it, and can advance a better in its  
 "Stead, I shall readily retract *my own*, and receive *his*; for it  
 "is no new Thing with us, that in our first Trials a Mistake is  
 "sometimes committed, and afterwards corrected by *better*  
 "*Judgments*.

"This is the utmost Proof I can offer, that the Letter is decy-  
 "pher'd right. If I am ask'd, by what *Guesses* or *Steps* I began  
 "and proceeded to make the Discovery, I hope I shall be ex-  
 "cus'd from answering any such Question. For, besides that my  
 "true Answer to it would, as I conceive, no ways affect the  
 "main Question, whether the Letter be rightly decypher'd;  
 "it might tend to reveal some Secrets of an Art, which \* *at pre-*  
 "sent

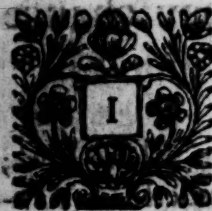
\* *Britannicus*, p. 6. c. 2. has let fall something very Odd upon this Head. He  
 commends



" *sent* lies in a very few Hands, and from the Nature of it  
 " *ought* to *continue* so. I have no personal or private Interest  
 " to serve, by concealing what I know of it. But the Discove-  
 " ry may be of great Detriment to the Publick, ~~if~~ *if* our  
 " Ways of Proceeding were known, Writers would guard against  
 " them, wou'd render the Art still harder, which is hard e-  
 " nough already, and would either improve the old, or invent  
 " a perfectly new Sort of Cypher, so that it might be next to  
 " impossible for me or any one else to decypher it, at least with  
 " such Expedition, as a pressing Necessity of Affairs may chance  
 " to require."

commends his Friend for having shewn a *Modesty* equal to his *Skill*, in all he said; and tells us, " it was urged several times by him, that he apprehended the par-  
 " ticular *Questions* proposed went too far; that the *Answers* to them might not  
 " only be a great *Prejudice* to himself as a *Decypherer*, with regard to an *Art*  
 " which lay in very few Hands, and was of that Nature AT PRESENT, as to  
 " continue so; but also of great Detriment to the *Publick*, the Safety of which  
 " might often depend upon this *Art*." Indeed? Is the Art of *such* a Nature at  
 present? and will it not be of the *same* Nature hereafter? or is it no matter,  
 what Detriment shall befall the Publick in another Age, when it can be of no Pre-  
 judice to himself as a *Decypherer*? No. This cannot be the Meaning either of  
 the *Artist* or of his *Defender*. For tho' the Words hitherto quoted may well e-  
 nough bear this Construction, (if in Truth they are capable of any,) there is  
 something in what immediately follows, not altogether so consistent with it. How  
 then? Is the Expression [*at present*] by some unaccountable Accident got into a  
 wrong Place? and have I had the Honour to correct a corrupted Passage and to  
 restore the true Reading? Or, in short, has this *Conjuring Art* had any *Malignant*  
*Influence* on our Author, and turn'd all his intended Compliments, which in any de-  
 gree related to it, into *Satire* and *Ridicule*?

## P O S T S C R I P T.

N the Year 1681, according to the Computation of the Booksellers, was publish'd by Order of the House of Commons a *Collection of Letters and other Writings, &c.* in which Book the following Passages, among others, are addressed to the Reader.

“ In most of these Letters the principal and material Words and Names of Persons and Places were writ in *Cypher*, but have been exactly decypher'd by the *Keys* or *Tables*, which were found together with them.

“ In several of them there were used *Figurative* Words or Words of *Cabal*; the Meaning of which is conjectured from the *Tenor* and *Sense* of the Correspondence, as (in the *Allegories* used between Mr. Coleman and the *Nuncio*) the Word *Creditors* appears to signify Adversaries; *Debtors*, Friends; &c.

“ Some of the Letters seiz'd at Mr. Coleman's are not decypherable by all or any of the *Keys* found, of which, however, *one* is thought fit to be publish'd, which is inserted towards the End.”

In a Letter from Monsieur *St. Germain* to Mr. Coleman, p. 32, &c. I find several Numbers decypher'd, such as 39 *the Duke*, 93 *the Dutchess*, 163 *the King of France*, 488 *his Confessor*, 300 *the Catholicks*, 26 *a Penion*, 80 *Money*, &c.

The



The 97th Page begins thus; " There were several Letters writ to Mr. *Coleman* by the late Earl of *Berkshire* under the borrowed Name of *Rice*. The Names of principal Men and Matters are therein expressed in Words of *Cabal* or *Cypher*; Which there was not any Key found to open and explain. But at the Committee of *Lords* there was the following Key made; but made by *Conjecture* only; and therefore it is not warranted for certain. But the Reader may use this or his own Sense and Conjecture upon the four or five of the Letters here exhibited." Then follows the Key, part of which is this; *Brother* or *Aunt* or *Lady*, the Duke of *Tork*; *Lady's Sister*, the King; *Lady's Niece*, the Duke of *Monmouth*; *Lady's House*, *Romish Religion*; *Plenipotentiary*, Lord Treasurer; &c.

The Letter, which was undecypherable by any of their Keys; is from *Albani*, then lately returned from his Nunciature at *Brussels*. It bears date at *Rome*, Jan. 12, 1675; and so much of it, as we are concerned with, is thus printed, p. 121.

" That which you propose touching 51666279669961 which is 667177576661676676 cannot be put in Execution 566662516756665667 but with the 777699916699616797669961 of all 5167917766629664996719, and onely 667191776691 comprising 96669991516791947151416791 you may then consider, if in the Lands where they are at present 5167916654566646267919680204 it would be to Purpose for the Interest of the Duke, to put in publick an Affair of such a Nature as this, of which I can assure you with Truth, and the Duke may be perswaded is what 6699776691656451916762766461719964767162516797666491616267963204 will imploy 6681272 and 5108126 and 516777626796646 for 516691916491616762666267916166945164645166516681266679981204 seeing that *Rome* and the Emperor have a most particular Zeal and Affection for all that which regard it." &c.

As the Publishers could not *decypher* these Words; it is plain that they could not *translate* them; so that of Necessity they must remain in their *original* Language: and accordingly I find them to be *French*. I could wish, that all the rest of the Letter had been published in *French* as well as in *English*. It would then have appear'd, that in the third Break, after the Cypher begins, *the* is *Masculine Singular*, and that in the fourth *all* is *Masculine Plural*; it would also have appear'd, in what *Number* and *Person* we were to have read *will imploy*. We should then have seen, that instead of *comprising* we must read *comprised*; we should very probably have seen, that *Lands* is an Error of the Translator, occasioned by his reading *Terres* instead of *Termes*; that he has rendered *où* *where* instead of *wherein*, and added *they* by his own Authority; in a Word, we should have been enabled to correct the Translation, or the Press, in divers other Particulars.

It cannot well be expected, that where the *Language* has suffered so much, the *Cypher* should escape unhurt. The Mistakes, which I can account for in it, are these; 6 for 7 in four Places, 6 for 1 once, 4 for 5 once, and 4 for 2 once; 6 is left out in one Place, and so is 1 in two Places, all which were easily rectified; in one Word there was great Confusion, which at length was set to rights by supplying 4 in its proper Place. From these Notices some other Person may receive Advantages, which I had not, towards decyphering this Piece; but I am sorry to inform him after all, that two or three Words are in so deplorable a Condition, that I doubt the most skilful Hand will hardly ever be able to recover them.

F I N I S.





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